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DEVELOPMENT APPLICATION

PROJECT: PROPOSED MIXED USE DEVELOPMENT

AT: 264-268 Keira St & 23 Kenny St, Wollongong
MARCH 2020

ISSUE: J

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Project
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing
Photomontage

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DEVELOPMENT DATA

Site Area - 2586 sqm

Proposed Units - 108 Units

36 - 1 bed

56 - 2 bed

12 - 3 bed

03 - 4 bed

	Allowable	Yield
FSR	3.66:1	3.65:1
FSA	9,464.75 sqm	9,230 sqm + 220sqm (16 Additional Carparks) Total = 9450 sqm
Building Height	15 Storey (48m)	15 Storey (48m)
Communal Open Space (C.O.S)	25% of site (646.5m²)	Complies (777m²)
Landscaped Area	7% of site (181m²)	Complies (183m²)
Solar	70% of apartments (75.6 units)	80% (87 units)
Cross Vent	60% of apartments (64.8 units)	63% (67 units)

UNIT SCHEDULE

	1 bed (unit per floor plate)	2 bed (unit per floor plate)	3 bed (unit per floor plate)	4 bed (unit per floor plate)	Visitor	Total	Area (Total GFA per floor plate)
Ground Floor	-	-	-	-	-	-	661 sqm Non-Resi:606 Resi:55
Level 1 -2	8	16	2	-	-	26	1015 sqm x 2 Total - 2030 sqm
Level 3 - 4	10	16	2	-	-	28	1069 sqm x 2 Total - 2138 sqm
Level 5	6	7	1	-	-	14	1038 sqm
Levels 6	2	1	1	-	-	4	349 sqm
Levels 7 - 13	14	14	7	-	-	35	378 sqm x 7 Total - 2646 sqm
Level 14	-	-	-	2	-	2	368 sqm
Total	40	54	13	2	-	109	9230 sqm Residential 8624 sqm
Percentage	36%	50%	12%	2%	-	100%	
Parking Required (RMS Requirements)	0.6/unit	0.9/unit	1.4/unit	1.4/unit	1/5 units		
	24	48.6	18.2	2.8	21.8	124 Spaces 94 Residential, Non-Residential 8, Visitor 22	
Parking Proposed						140 Spaces 110 Residential, Commercial 8, Visitors 22 48 Bicycles, 8 Motorcycles	

Apartment Schedule Level 1 - 5

Room	Rooms	Area	Storage in Unit	Storage in Common	Total Storage	Cross Ventilated	Solar Access	Adaptable
101, 201, 301, 401, 501	2 Bed	75 m²	5.5 m³	2.50 m³	8.0 m³	Yes	No	No
102, 202, 302, 402, 502	2 Bed	75 m²	4.0 m³	5.00 m³	9.0 m³	Yes	Yes	No
103,	1 Bed	50 m²	3.6 m³	2.50 m³	6.1 m³	Yes	Yes	Yes
104, 204, 304, 404, 504	1 Bed	50 m²	3.5 m³	2.50 m³	6.0 m³	No	Yes	Yes
105, 205, 305, 405, 505	1 Bed	55 m²	3.5 m³	2.50 m³	6.0 m³	Yes	Yes	Yes
106, 206, 306, 406, 506	1 Bed	50 m²	4.2 m³	2.50 m³	6.7 m³	Yes	Yes	No
107,	2 Bed	71 m²	7.9 m³	2.50 m³	10.4 m³	Yes	Yes	No
108,	2 Bed	75 m²	6.5 m³	2.50 m³	9.0 m³	Yes	Yes	No
109, 209, 309, 409, 509	2 Bed	75 m²	8.1 m³	2.50 m³	10.6 m³	Yes	Yes	No
110, 210, 310, 410, 510	2 Bed	75 m²	16.2 m³	2.50 m³	21.2 m³	No	Yes	No
111, 211	3 Bed	95 m²	5.5 m³	5.00 m³	10.5 m³	Yes	No	No
112, 212	2 Bed	75 m²	5.5 m³	2.50 m³	8.0 m³	No	No	No
113, 213	2 Bed	80 m²	11.0 m³	2.50 m³	16.0 m³	Yes	No	No
203, 303, 403, 503	1 Bed	50 m²	3.5 m³	2.50 m³	6.0 m³	Yes	Yes	No
207, 307, 407, 507	2 Bed	70 m²	11.0 m³	2.50 m³	13.5 m³	Yes	Yes	No
208, 308, 408, 508	2 Bed	75 m²	10.7 m³	2.50 m³	13.2 m³	Yes	Yes	No
311, 411	2 Bed	80 m²	5.5 m³	2.50 m³	8.0 m³	Yes	Yes	No
312, 412	1 Bed	56 m²	6.8 m³	2.50 m³	9.3 m³	No	No	No
313, 413	2 Bed	75 m²	6.1 m³	2.50 m³	8.6 m³	No	No	No
314, 414	3 Bed	95 m²	8.0 m³	2.50 m³	10.5 m³	Yes	No	No
511,	2 Bed	70 m²	7.4 m³	2.50 m³	9.9 m³	Yes	Yes	No
512,	1 Bed	55 m²	5.2 m³	2.50 m³	7.7 m³	No	No	No
513,	1 Bed	56 m²	6.2 m³	0.00 m³	6.2 m³	No	Yes	No
514,	3 Bed	96 m²	7.5 m³	2.50 m³	10.0 m³	Yes	Yes	No

Apartment Schedule Level 6 - 13

Room	Rooms	Area	Storage in Unit	Storage in Common	Total Storage	Cross Ventilated	Solar Access	Adaptable
601, 701, 801, 901, 1001, 1101, 1201, 1301	2 Bed	75 m²	6.7 m³	2.50 m³	9.2 m³	Yes	Yes	No
602, 702, 802, 902, 1002, 1102, 1202, 1302	1 Bed	50 m²	3.8 m³	2.50 m³	6.3 m³	No	Yes	No
603, 703, 803, 903, 1003, 1103, 1203, 1303	1 Bed	50 m²	3.7 m³	2.50 m³	6.2 m³	No	Yes	No
604,	3 Bed	95 m²	7.6 m³	2.50 m³	10.1 m³	Yes	Yes	No
704, 804, 904, 1004, 1104, 1204, 1304	2 Bed	75 m²	5.5 m³	2.50 m³	8.0 m³	No	Yes	No
705, 805, 905, 1005, 1105, 1205, 1305	3 Bed	95 m²	5.0 m³	5.00 m³	10.0 m³	Yes	Yes	No

Apartment Schedule Level 14

Room	Rooms	Area	Storage in Unit	Storage in Common	Total Storage	Cross Ventilated	Solar Access	Adaptable
1401	4 Bed	162 m²	13.0 m³	5.00 m³	12.9 m³	Yes	Yes	No
1402	4 Bed	175 m²	11.3 m³	5.00 m³	16.3 m³	Yes	Yes	No

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C	04.03.19	Preliminary Issue
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I	25.03.20	DRP Revision

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Client

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Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Development Data

North

Scale

1 : 100 @ A3

Date

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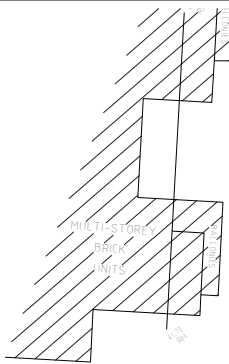
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COMMERCIAL BUILDING
CONCRETE ROOF
No. 25 ATCHISON STREET
"HATCH"

EIGHT-STOREY
MIXED-USE BUILDING
METAL ROOF
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Drawing
Site Survey

North

Scale

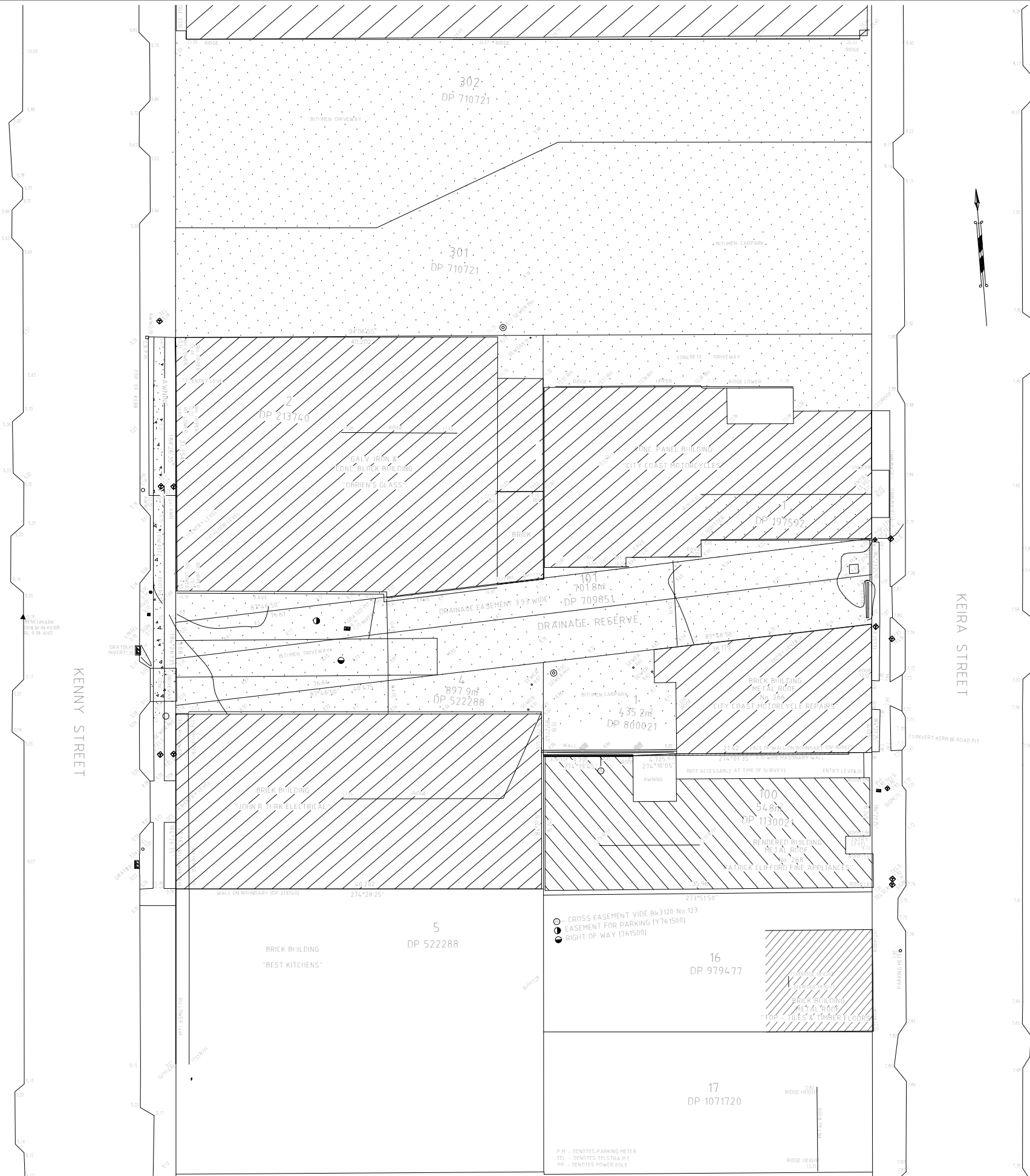
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2019

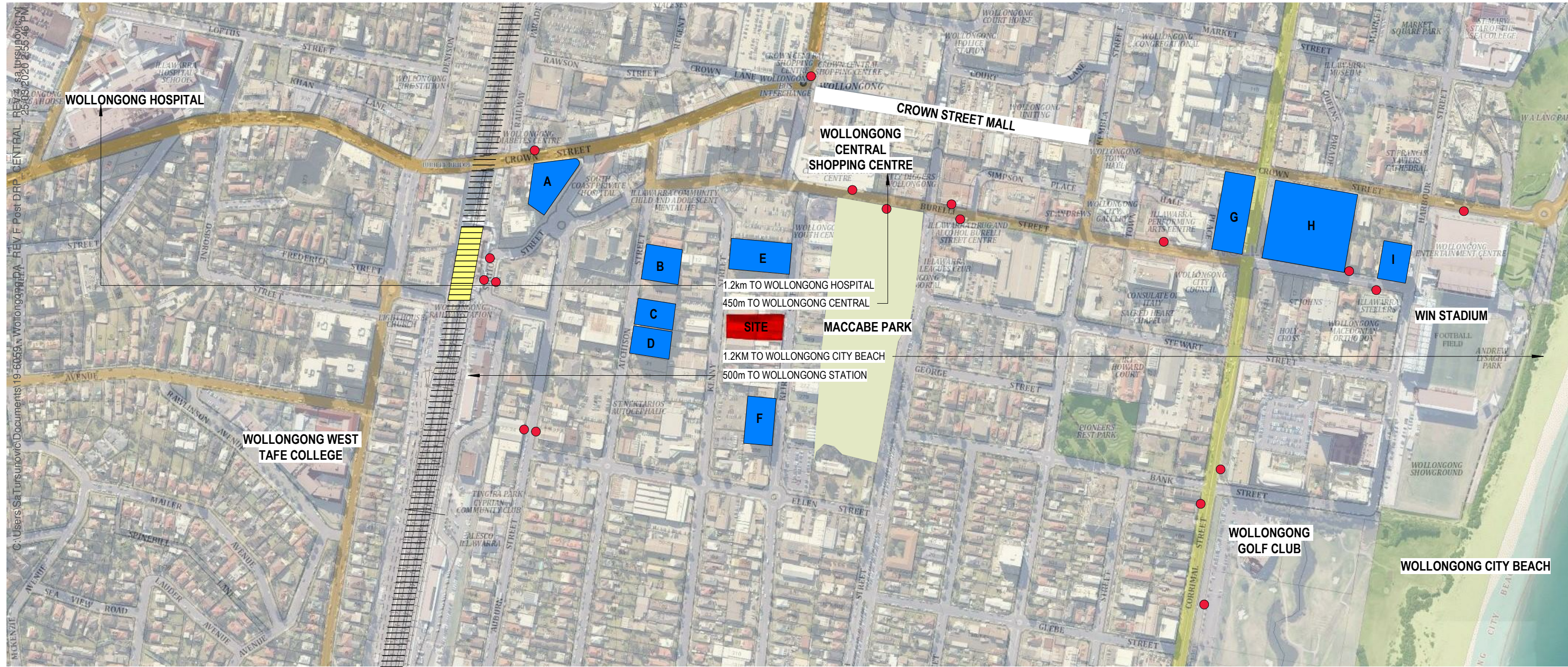
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A 313 Crown Street



B 11-15 Atchison Street



C 25 Atchison Street



D 27 Atchison Street



E 258 Keira Street



F 280 Keira Street



G 51 Crown Street



H 26 Burelli Street



I 46 Harbour Street

1 | Site Context Plan

1 : 5000

LEGEND

- SITE
- SURROUNDING DEVELOPMENTS
- |||| TRAIN TRACK
- TRAIN STATION
- BUS STOP



Rev		
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Drawing
Site Context Plan



Scale
1 : 5000 @ A3
1:2500 @ A1

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Image A



Image B



Image C



Image D



Image E



Image F

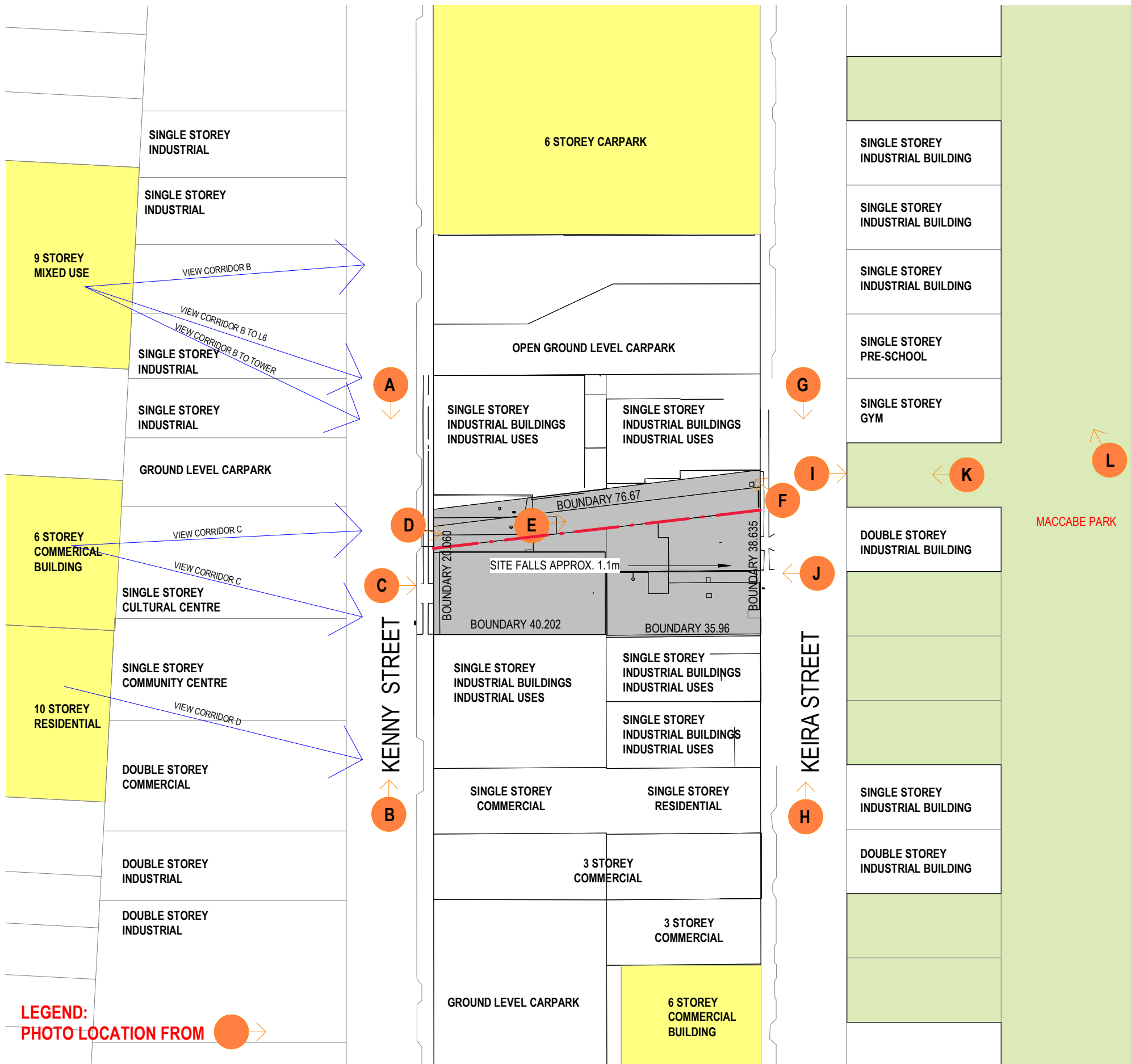


Image G



Image H



Image I



Image J

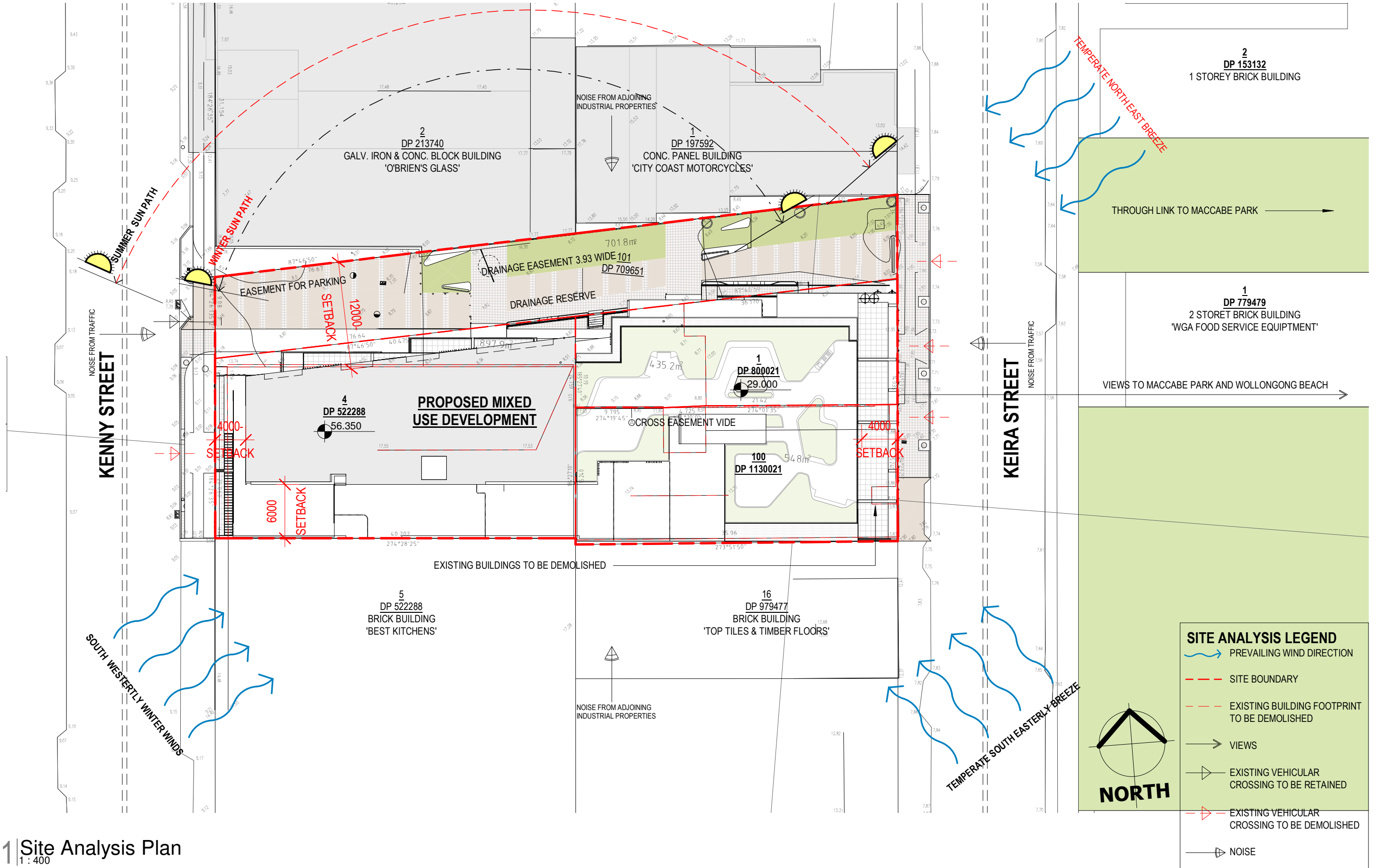


Image K



Image L

TOTAL SITE AREA = 2586m²
STORMWATER RESERVE + EASEMENT = 702m²
USEABLE SITE AREA = 1884m²



1 Site Analysis Plan

1:400

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Drawing

Site Analysis Plan

North



Scale

1:400 @ A3
1:200 @ A1

Date

2019

Project No.

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Drawing No.

A006 / H

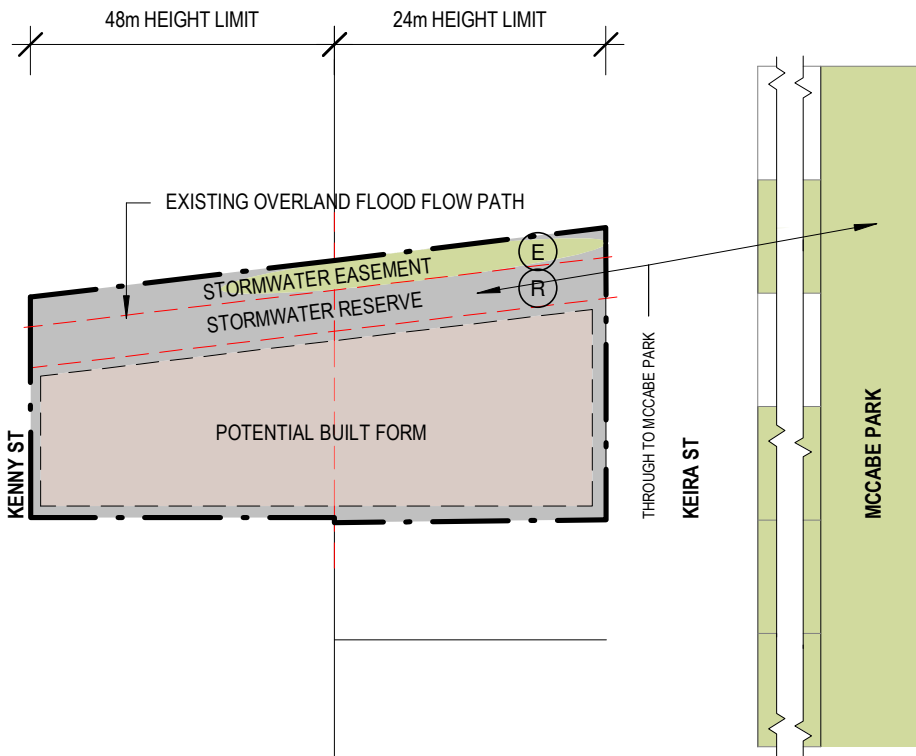
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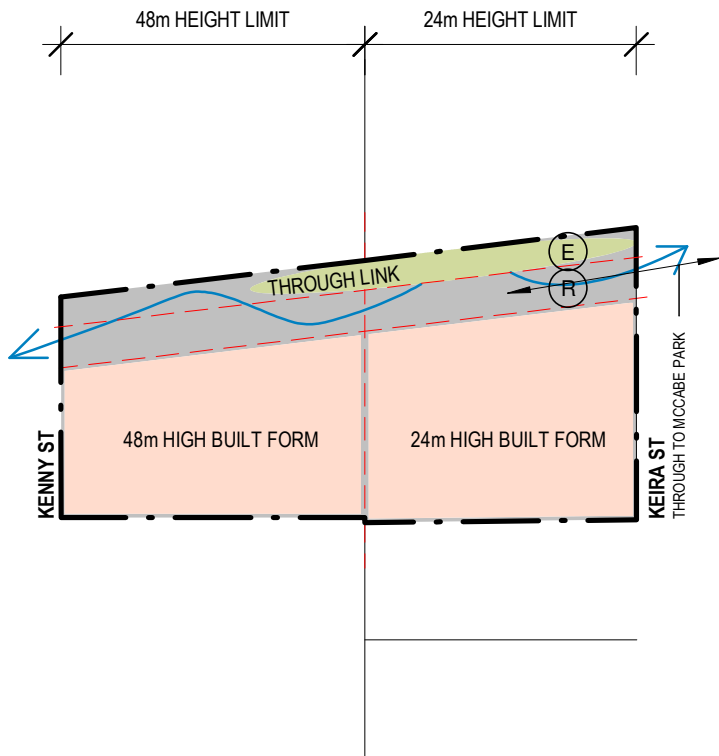
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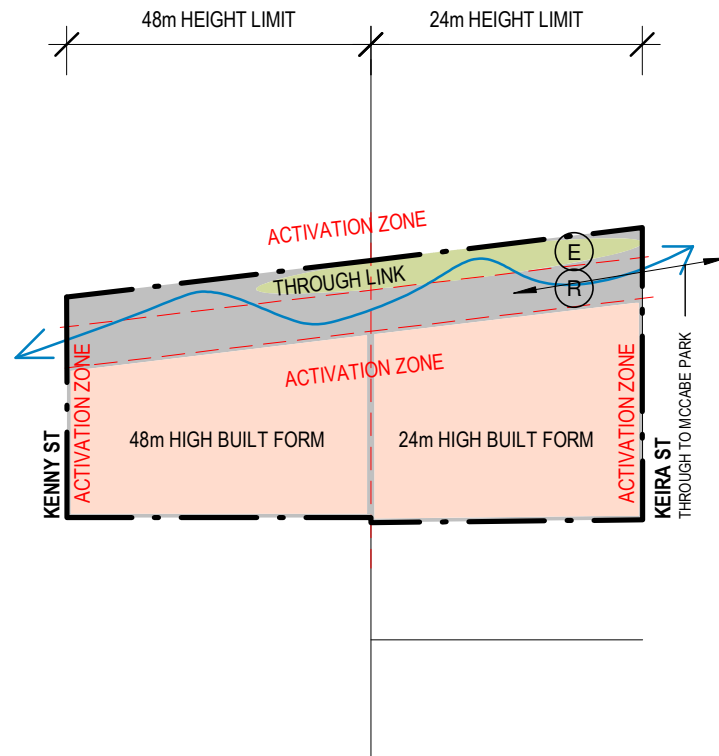
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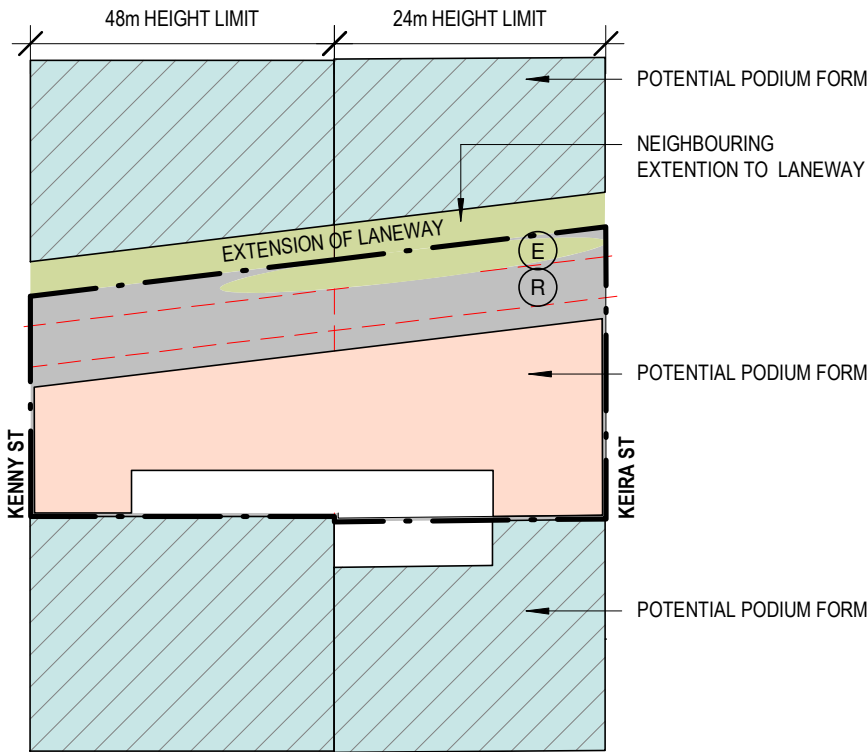
EXISTING SITE CONSTRAINTS AND SUBDIVISION PATTERN
1. STORMWATER EASEMENT, RESERVE AND OVERLAND FLOOD FLOW PATH RUN THROUGH NORTHERN PORTION OF SITE
2. VARYING HEIGHT LIMITS BETWEEN EASTERN AND WESTERN PORTION OF SITE



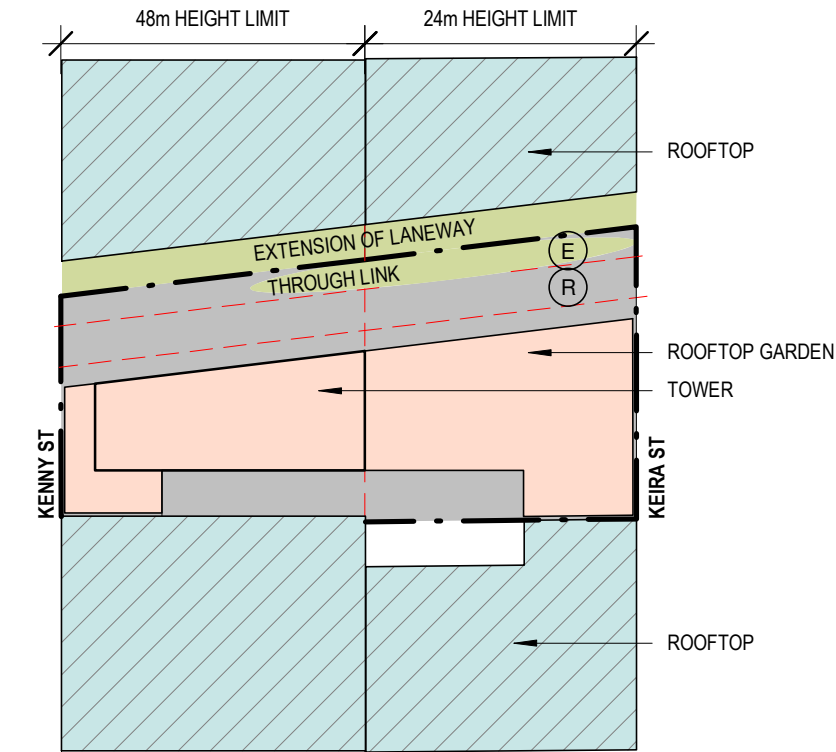
OPPORTUNITIES
1. PEDESTRIAN THROUGH LINK BETWEEN KENNY STREET AND KEIRA STREET TO MACCABE PARK.
2. SPLIT LEVEL PODIUM AND TOWER DESIGN



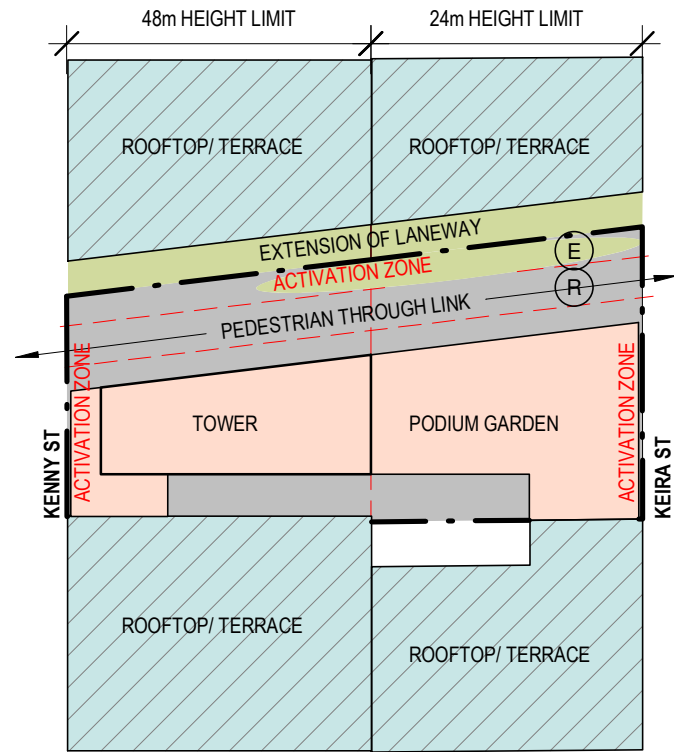
OPPORTUNITIES
1. INTEGRATION WITH PUBLIC REALM: GROUND FLOOR ACTIVATION ALONG STREET FRONTAGES AND THROUGH STORMWATER EASEMENT+RESERVE
2. LANDSCAPED PEDESTRIAN THROUGH LINK ON GROUND LEVEL



SITE + NEIGHBOURING PROPERTIES MASSING
PODIUM MASSING FOOTPRINT (GROUND TO 24m) INCORPORATING COUNCIL SETBACKS AND POTENTIAL LANDSCAPE ZONES



SITE + NEIGHBOURING PROPERTIES MASSING
FSR RESTRICTIONS ON NEIGHBOURING SITES LIMIT THE POTENTIAL FOR AN ADJOINING PODIUM+TOWER CONSTRUCTION

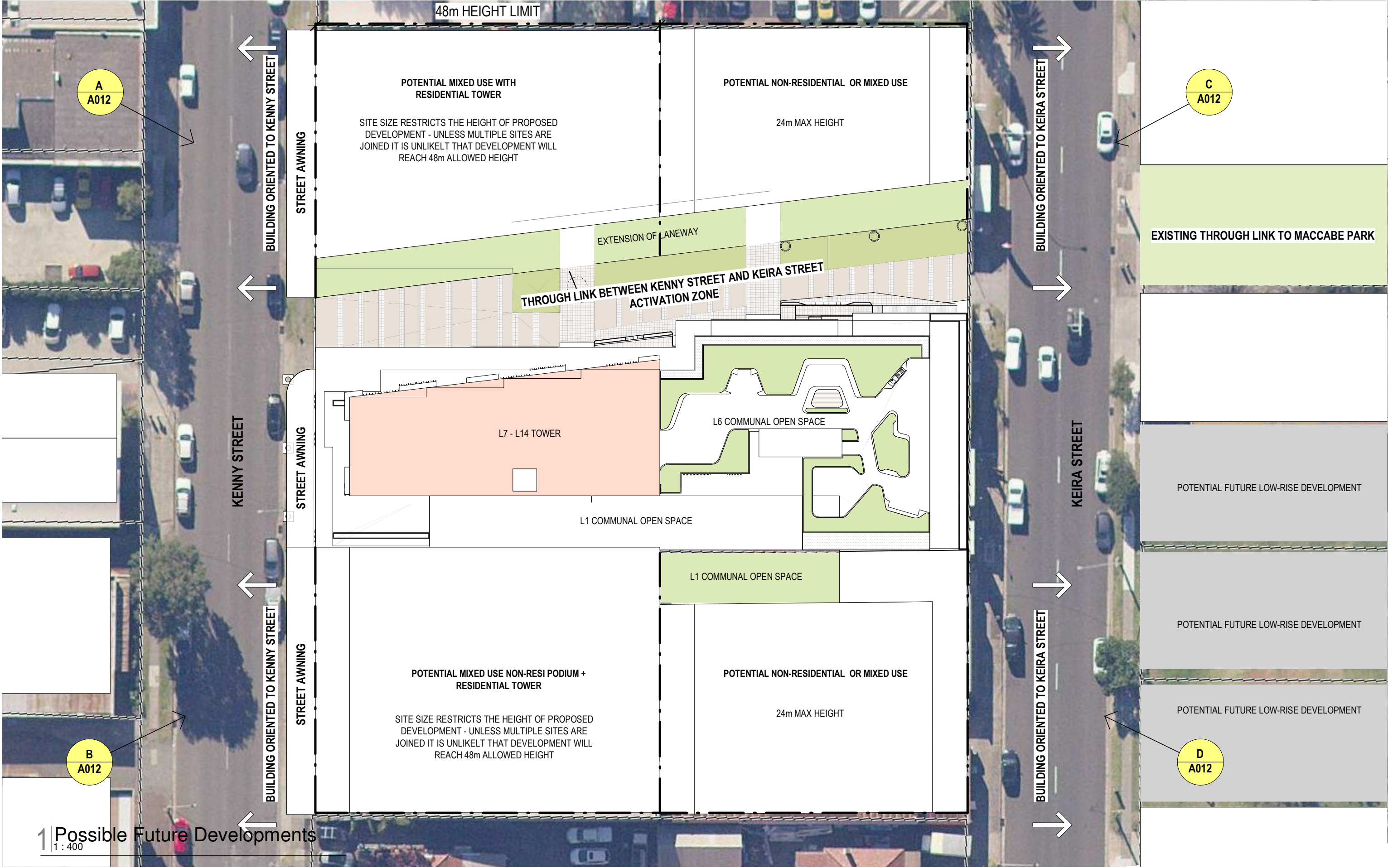


SUMMARY
1. ACTIVATED THROUGH LINK ON GROUND LEVEL CONNECTING KENNY STREET TO KEIRA STREET AND MACCABE PARK
2. ROOFTOP GARDENS FACING NORTH-EAST TO MACCABE PARK

1 Existing Site Condition and Opportunities

1 : 1000

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1 Possible Future Developments

1 : 400

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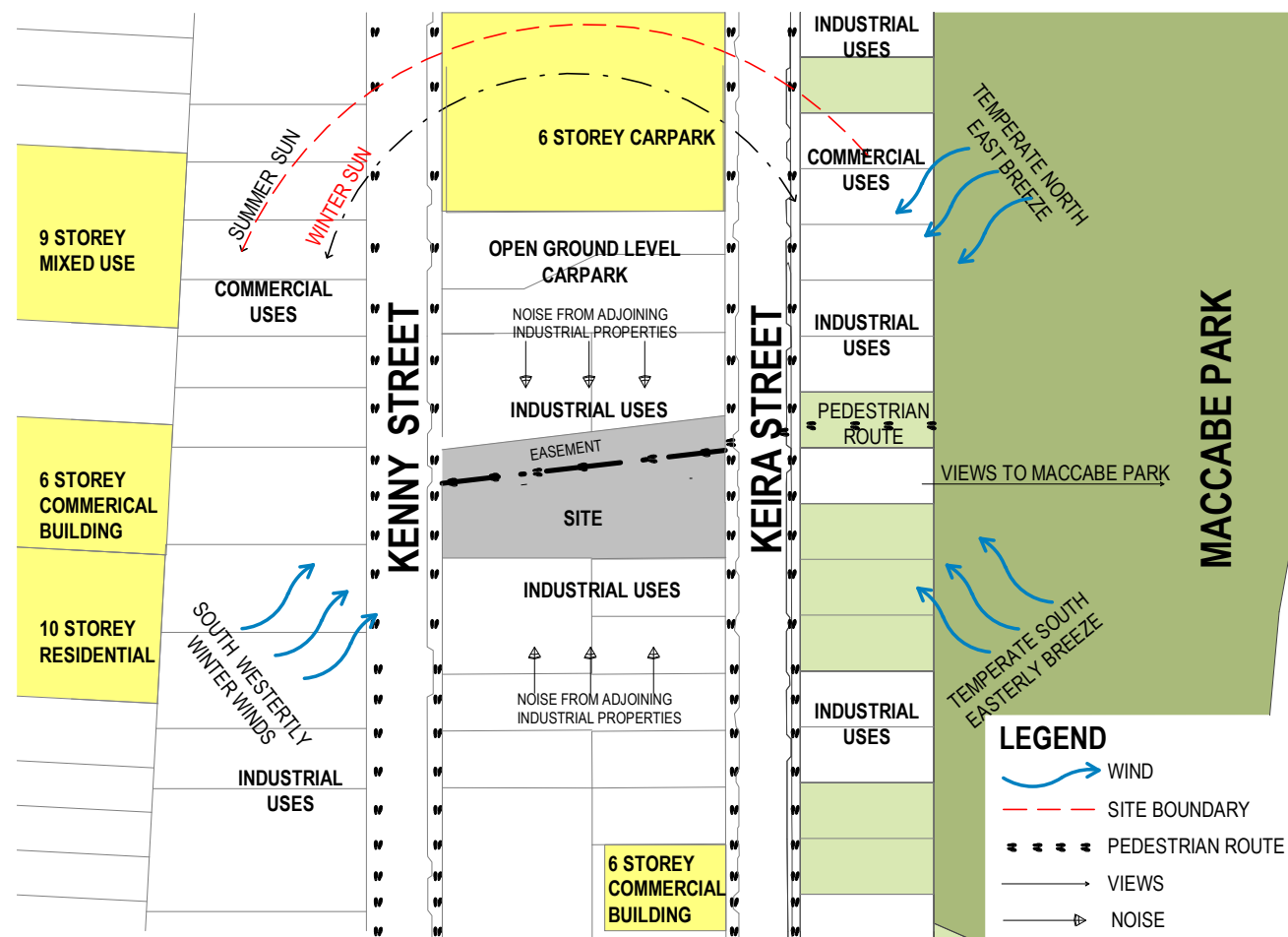
Client
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Project
**Mixed Use Development
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Kenny St, Wollongong**

Drawing
**Proposed Future Character
- Adjacent Building
Envelopes**

North	Scale	Date	Project No.	Drawing No.
	1 : 400 @ A3 1:200 @ A1	2020	19-6059	A009 / C
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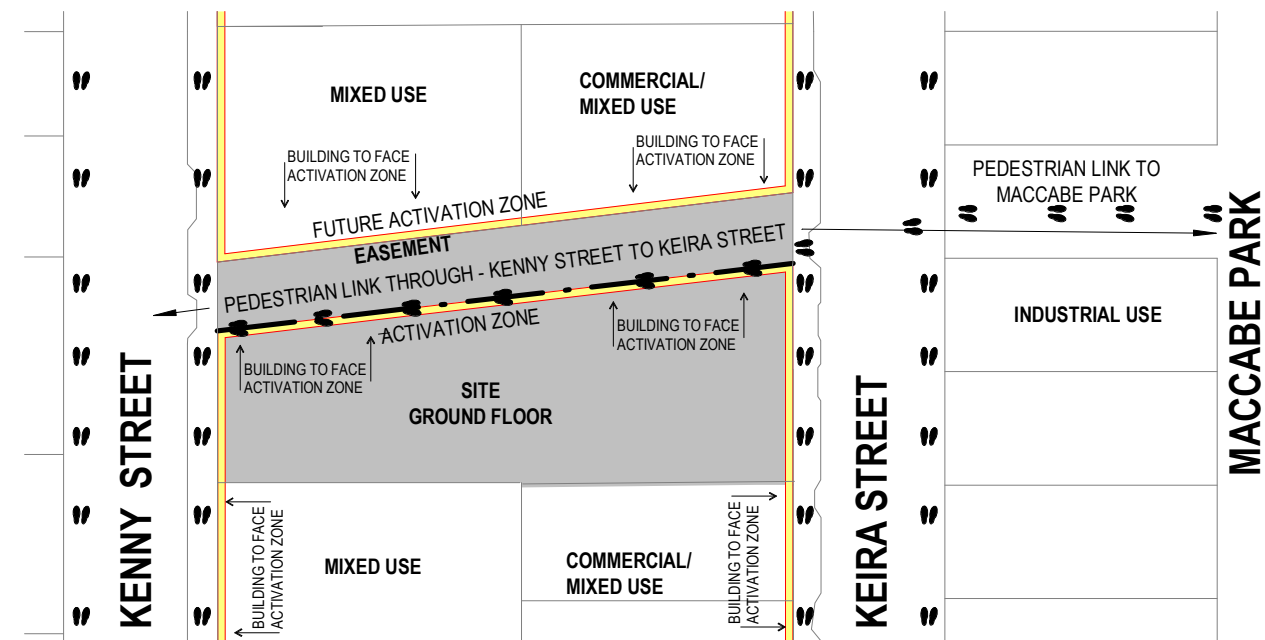
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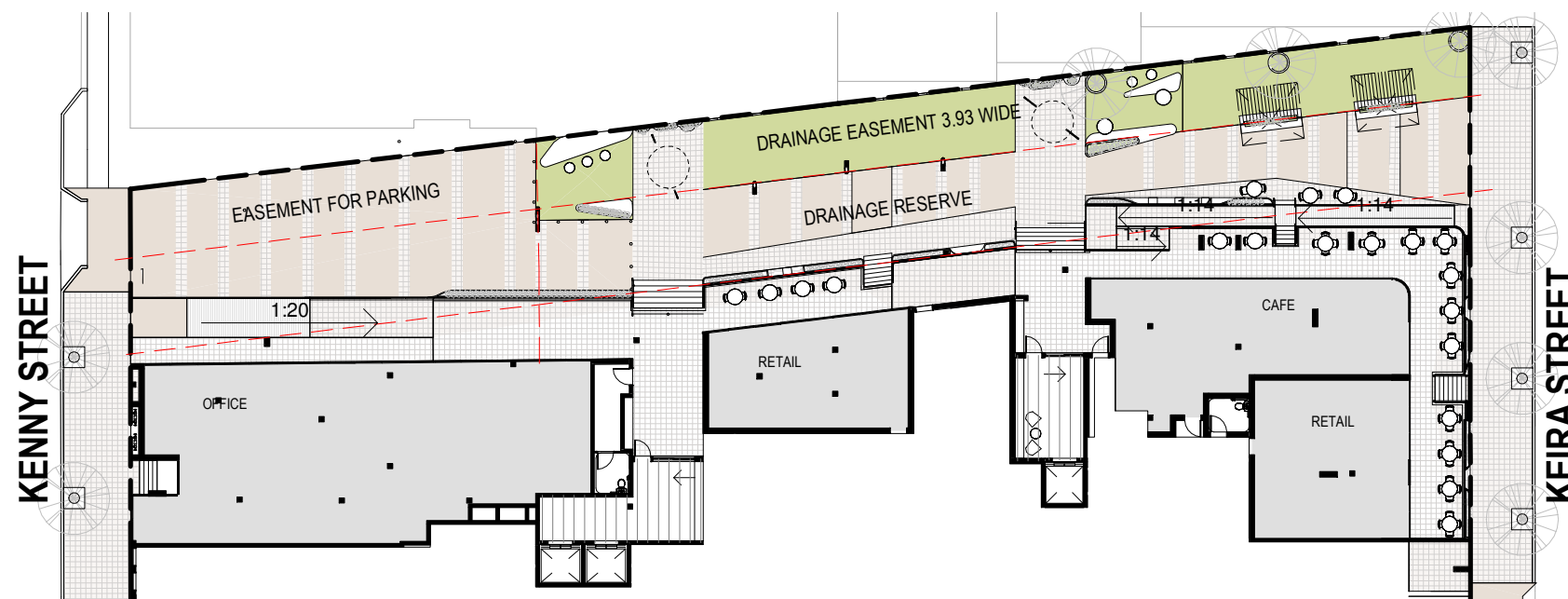
1 Ground Level - Existing Site Conditions
1 : 2000



SITE OPPORTUNITIES FOR GROUND LEVEL: ACTIVE INDOOR/ OUTDOOR CAFE LIFESTYLE



2 Ground Level - Proposed Activation of Street Frontages



3 Ground Level - Pedestrian Laneway Through Existing Overland Flood Flow

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Drawing

Proposed Future Character
- Ground Floor Treatment

North



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As indicated @
A3

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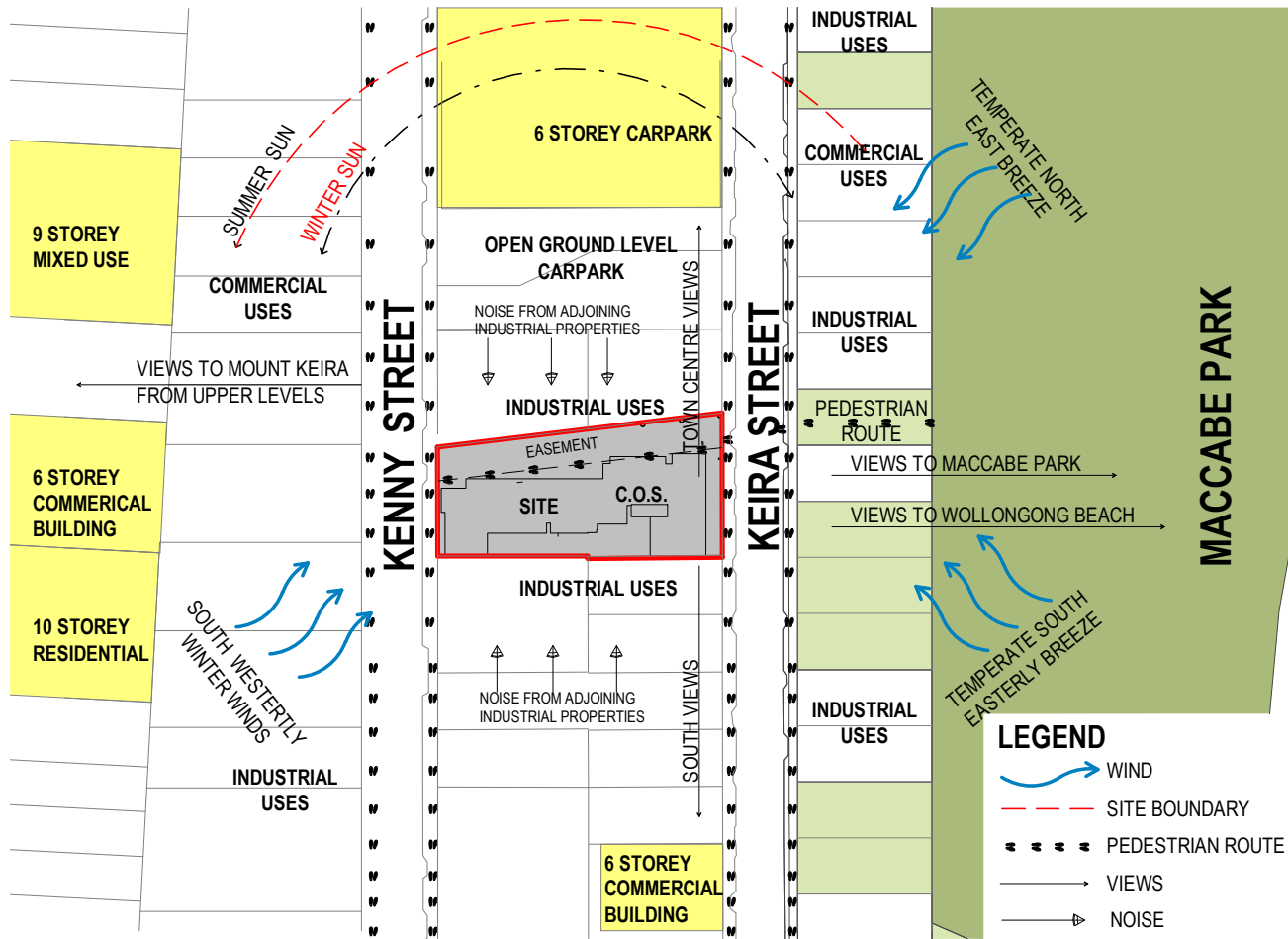
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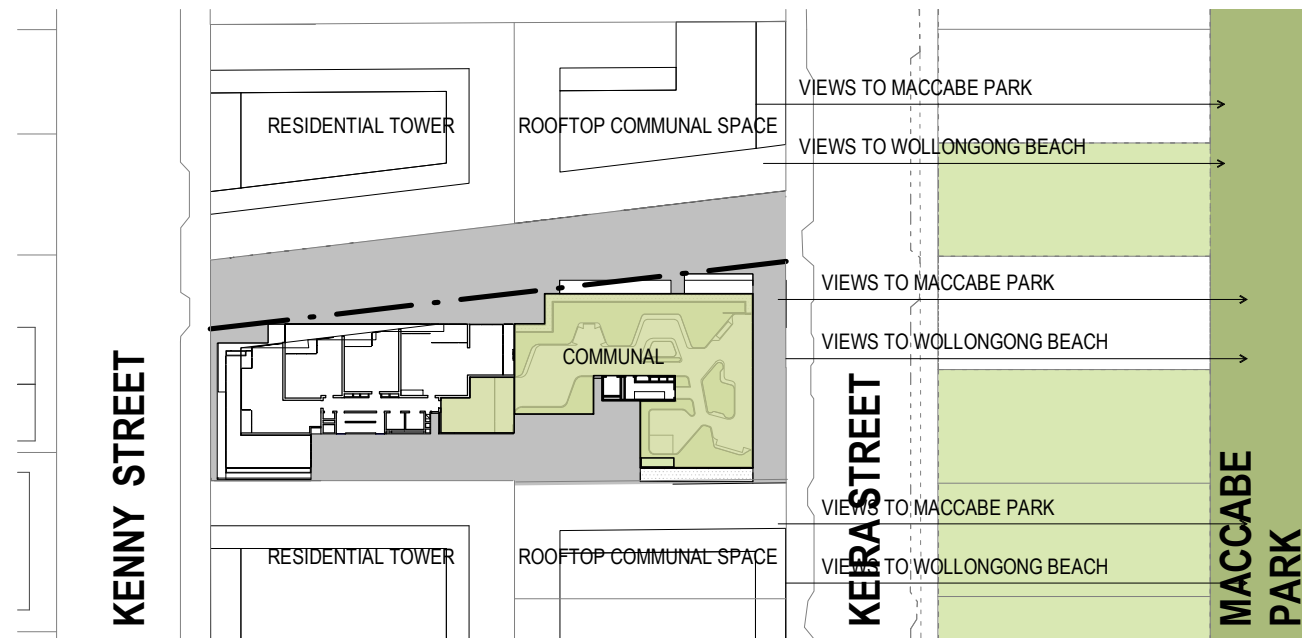
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1 | Level 6 C.O.S - Existing Site Conditions
1 : 2000



2 | Level 6 C.O.S - Proposed Design Quality
1 : 1000



SITE OPPORTUNITIES FOR LEVEL 6 COMMON OPEN SPACE: ROOFTOP ENTERTAINMENT



VIEWS TO MOUNT KEIRA



WOLLONGONG BEACH

F. R. DEVELOPMENT

Potential Future Context Analysis

2020

19-6059

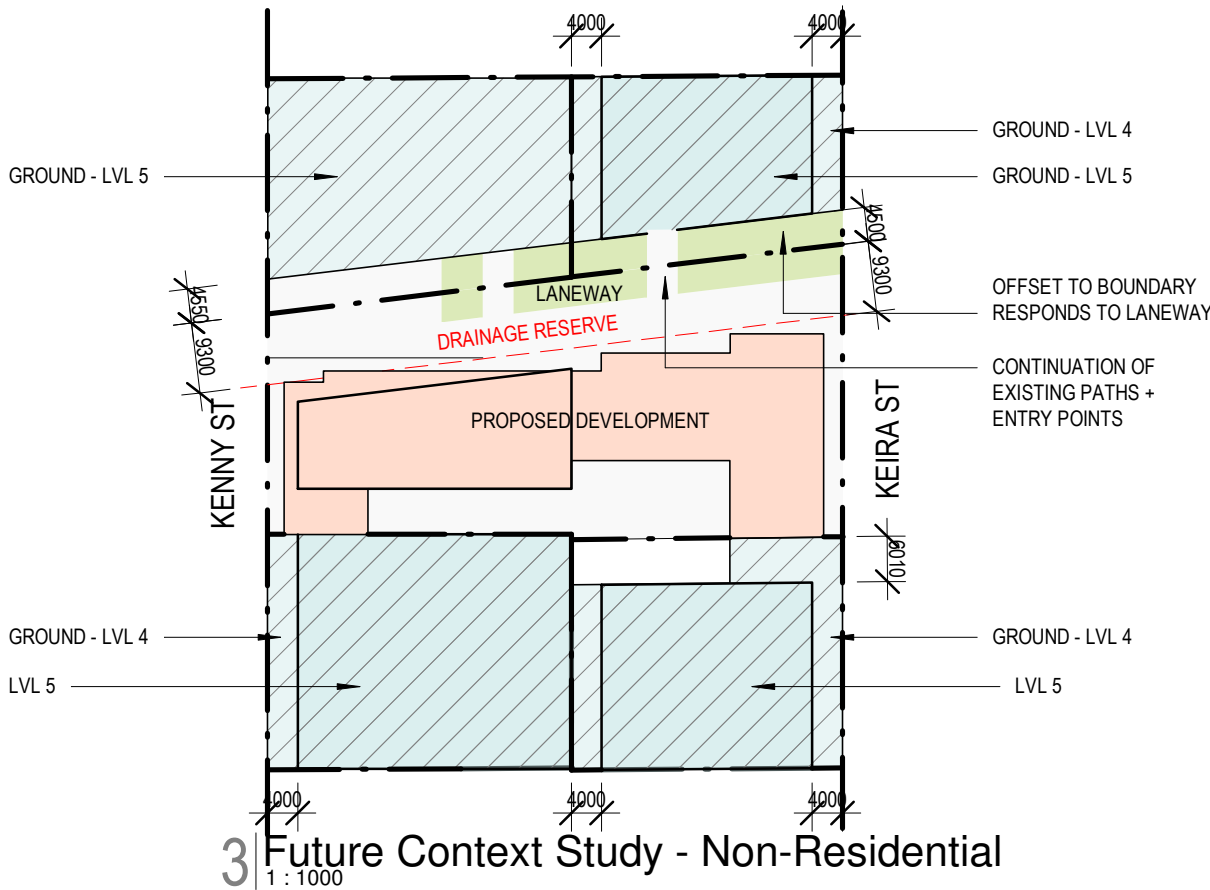
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KEY NOTES

DEVELOPMENTS TO THE NORTH

- PROPOSED DEVELOPMENT HAS MINIMAL IMPACT TO SOLAR ACCESS TO DEVELOPMENTS ON THE NORTH

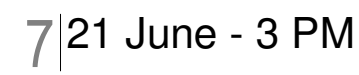
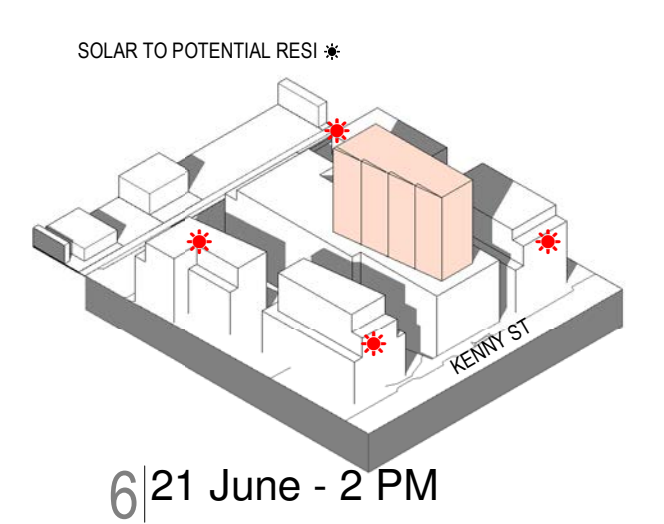
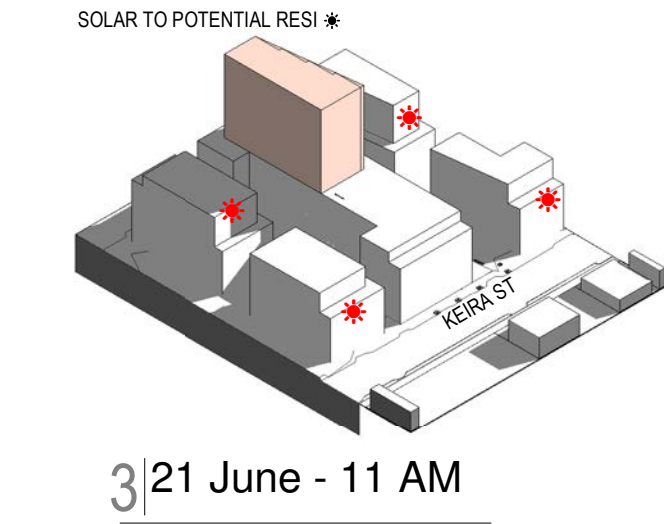
DEVELOPMENTS TO THE SOUTH

- PROPOSED TOWER WILL RESTRICT SOLAR ACCESS TO PODIUM UNITS AT 25-27 KENNY ST. HOWEVER IT IS UNLIKELY THAT THE PODIUM WILL BE USED FOR RESIDENTIAL USES AS THERE IS A HIGHER YIELD POTENTIAL OFFERED WITH A MIXED USE DEVELOPMENT. WITH THAT, THE SOLAR IMPACT OF PROPOSED TOWER TO 25-27 KENNY ST BE MITIGATED.

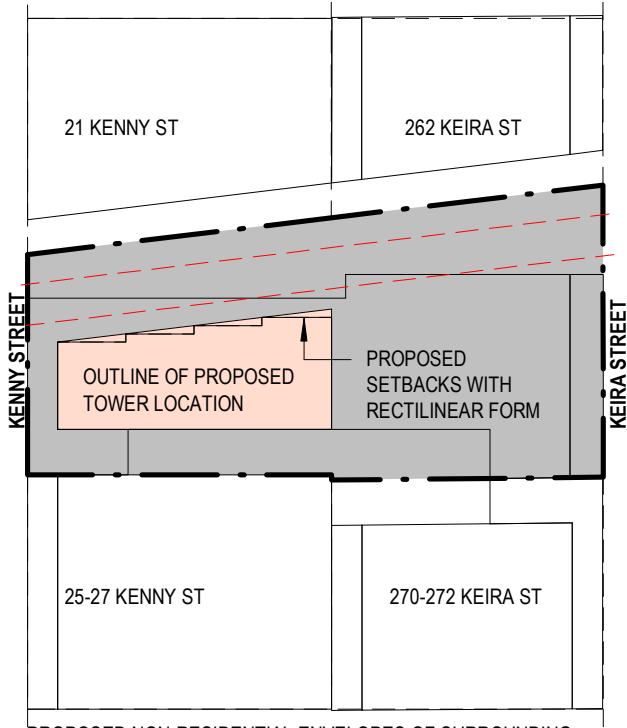
NO TOWERS TO NEIGHBOURING DEVELOPMENTS
DUE TO FSR RESTRICTIONS ON NEIGHBOURING SITES, IT IS UNLIKELY THAT A TOWER DEVELOPMENT WILL BE PROPOSED UNLESS MULTIPLE SITES ARE CONSOLIDATED. AS SUCH, THE SHAPE OF THE TOWER DOES NOT AFFECT THE SHAPE OF NEIGHBOURING DEVELOPMENTS.

AESTHETIC
A SKEWED TOWER PRODUCES A MORE REGULAR FORM WHEREAS AS A RECTILINEAR TOWER WILL FEATURE NUMEROUS STEPS TO ACHIEVE A SIMILAR FSR YIELD.

CONCLUSION
DUE TO ITS UNLIKELY NEGATIVE IMPACT ON NEIGHBOURING DEVELOPMENTS, AND MORE REGULAR AESTHETIC, THE SKEWED TOWER IS PREFERRED.



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PROPOSED NON-RESIDENTIAL ENVELOPES OF SURROUNDING DEVELOPMENTS WITH SOLAR ACCESS AND THE IMPACT OF PROPOSED DEVELOPMENT SHOWN.

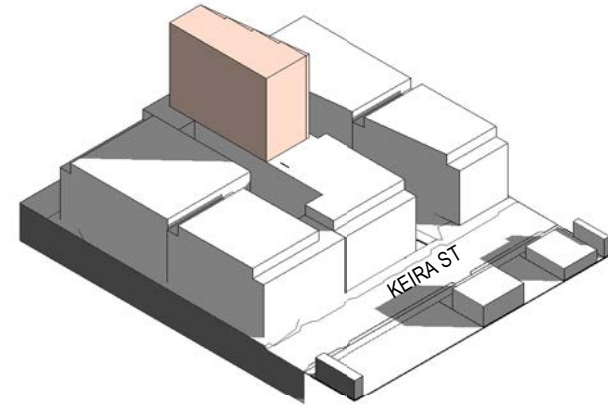
KEY NOTES
HEIGHT OF NEIGHBOURING DEVELOPMENTS
DUE TO FSR RESTRICTIONS, NEIGHBOURING DEVELOPMENTS ARE UNLIKELY TO REACH THE SAME HEIGHT AS THE PROPOSED DEVELOPMENT. AS SUCH POTENTIAL OVERSHADOWING TO PROPOSED RESIDENTIAL UNITS FROM NEIGHBOURING DEVELOPMENTS IS LIMITED

SKEWED VS RECTILINEAR TOWER
A STUDY OF A SKEWED VS RECTILINEAR TOWER, AND ITS IMPACT ON THE CHARACTER OF SURROUNDING DEVELOPMENTS IS INDICATED IN THE DRAWINGS.

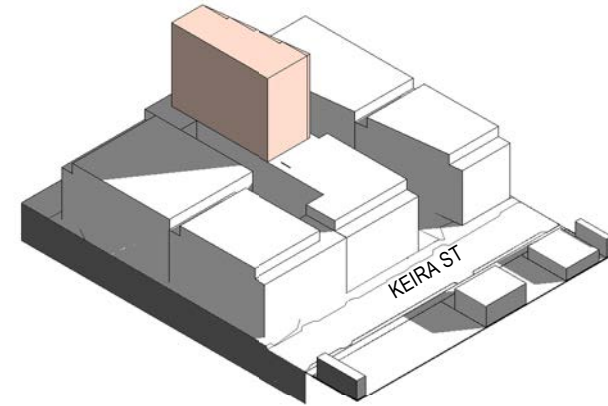
NO TOWERS TO NEIGHBOURING DEVELOPMENTS
DUE TO FSR RESTRICTIONS ON NEIGHBOURING SITES, IT IS UNLIKELY THAT A TOWER DEVELOPMENT WILL BE PROPOSED UNLESS MULTIPLE SITES ARE CONSOLIDATED. AS SUCH, THE SHAPE OF THE TOWER DOES NOT AFFECT THE SHAPE OF NEIGHBOURING DEVELOPMENTS.

AESTHETIC
A SKEWED TOWER PRODUCES A MORE REGULAR FORM WHEREAS AS A RECTILINEAR TOWER WILL FEATURE NUMEROUS STEPS TO ACHIEVE A SIMILAR FSR YIELD.

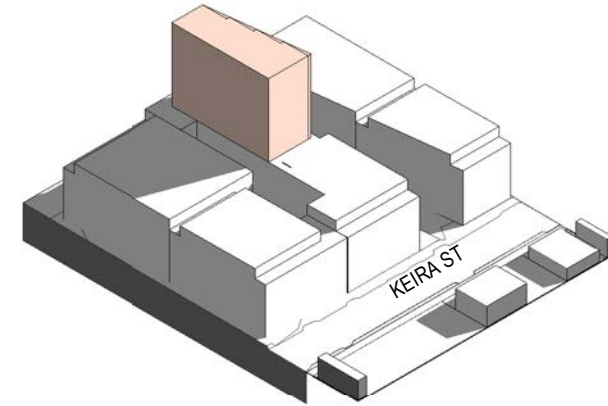
CONCLUSION
DUE TO ITS UNLIKELY NEGATIVE IMPACT ON NEIGHBOURING DEVELOPMENTS, AND MORE REGULAR AESTHETIC, THE SKEWED TOWER IS PREFERRED.



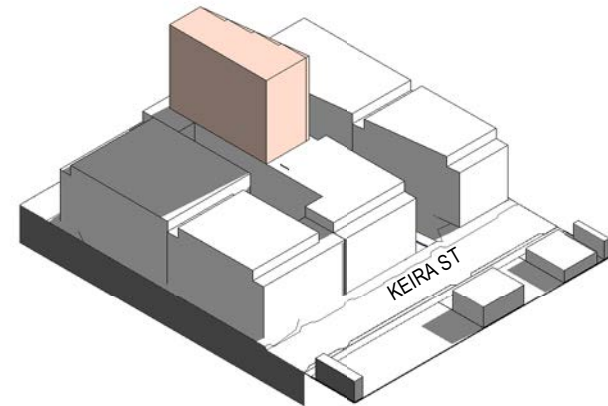
1 | 21 June - 9 AM Rectilinear



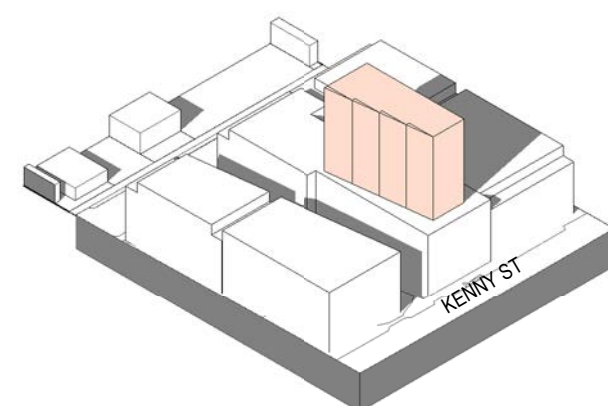
2 | 21 June - 10 AM Rectilinear



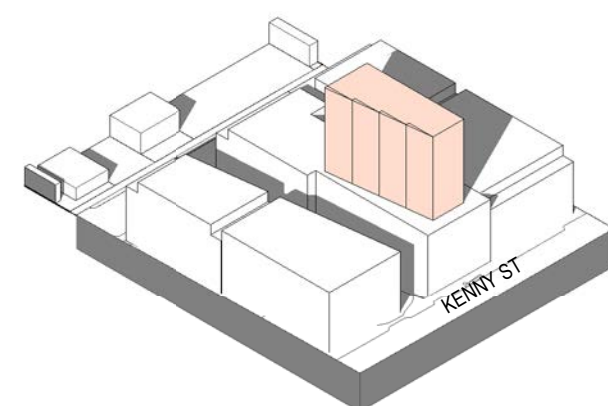
3 | 21 June - 11 AM Rectilinear



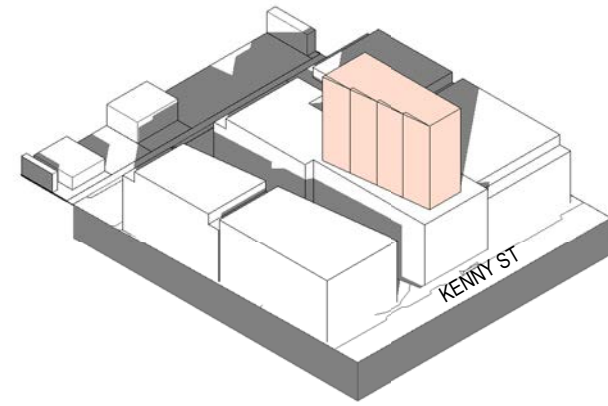
4 | 21 June - 12 Noon Rectilinear



5 | 21 June - 1 PM Rectilinear



6 | 21 June - 2 PM Rectilinear



7 | 21 June - 3 PM Rectilinear

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1| Potential Future Character View A



2| Potential Future Character View B



3| Potential Future Character View C



4| Potential Future Character View D

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1 Existing View From 11-15 Atchison Road



2 Future View From 11-15 Atchison Road



3 Existing View from 27 Atchison Road



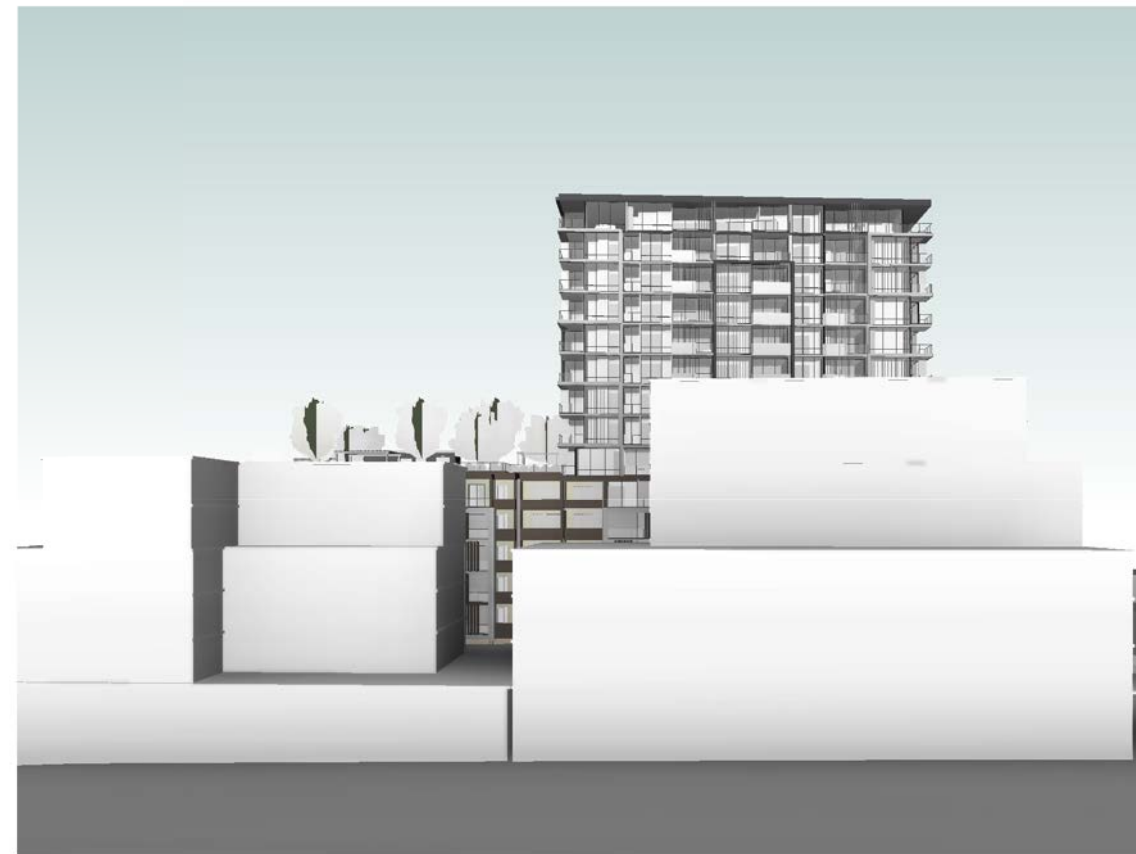
4 Future View from 27 Atchison Road



1 Existing View From Kenny Street Carpark



3|Existing View From 286 Keira Street

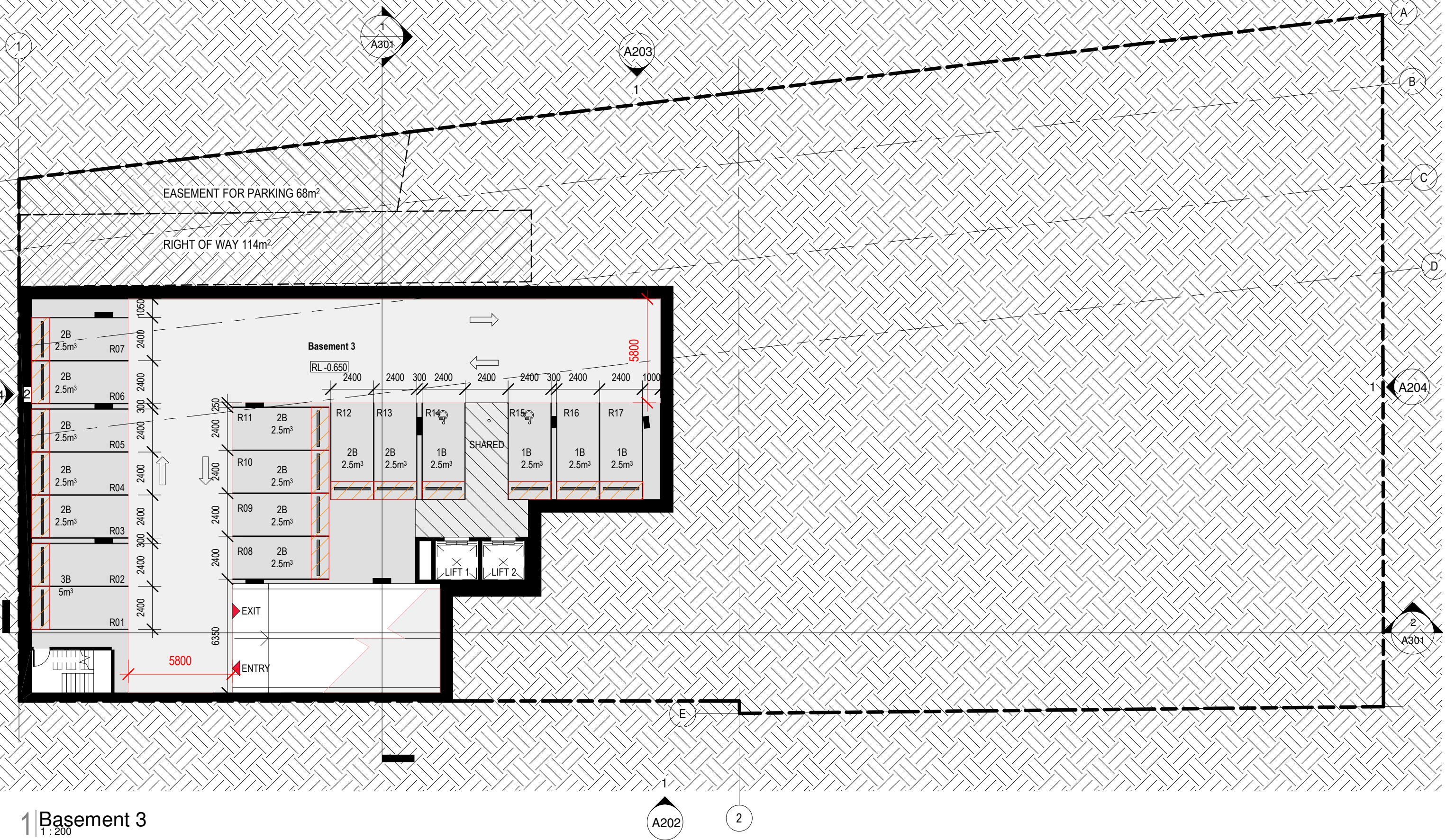


2|Future View From Kenny Street Carpark

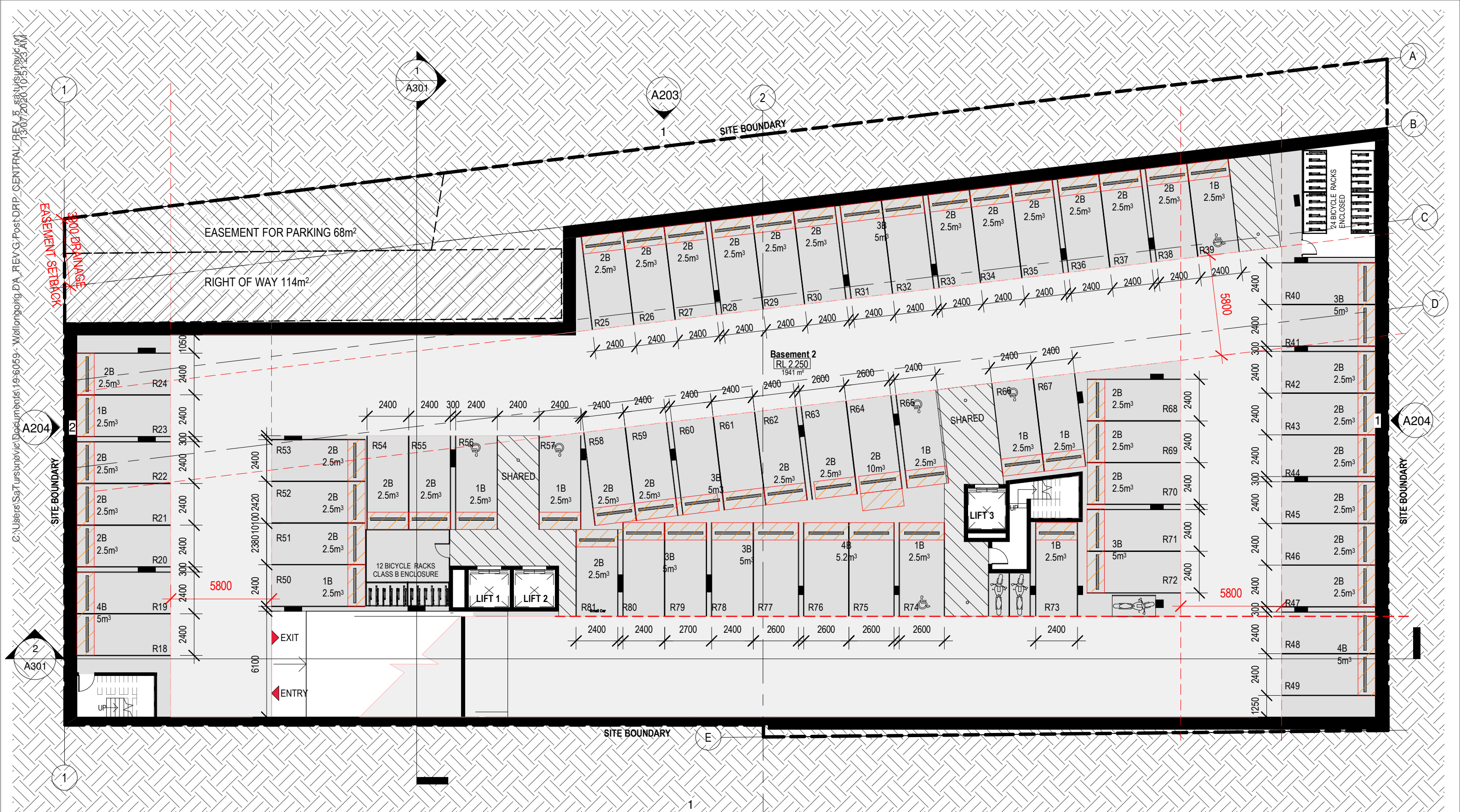


4|Future View From 286 Keira Street

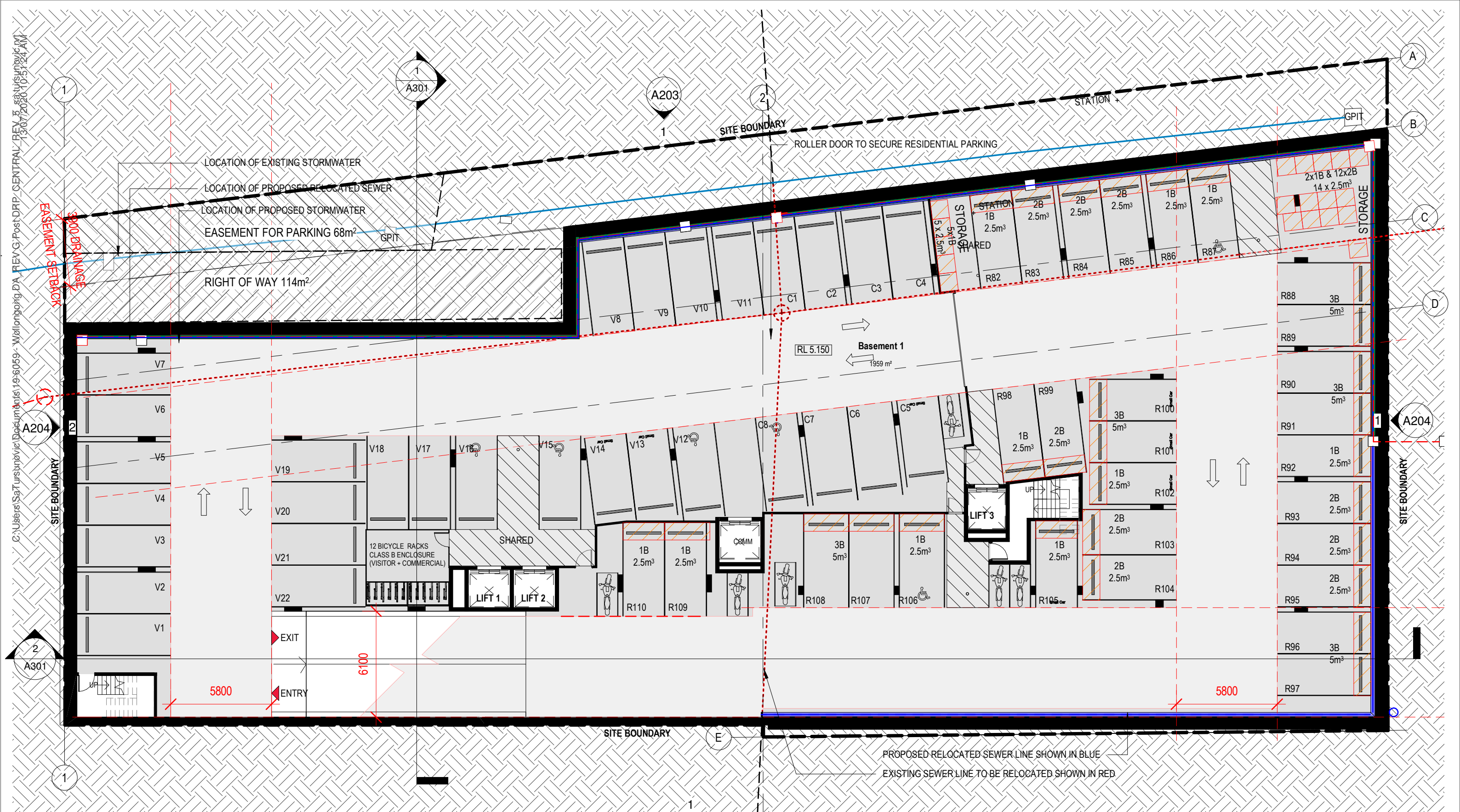
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1 Basement 3
1 : 200



1 Basement 2
1:200



1 Basement 1
1 : 200

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Rev		
Issue	Date	Description
E	24.04.19	DA Submission
F	19.07.19	DA Resubmission
G	25.19.19	Issue for Coordination
H	22.10.19	Issue for Coordination
I	08.01.19	Issue for DA RFI
J	31.03.20	DRP Revision 2
K	10.07.20	RFI - Right of Way

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Basement 1

North



Scale
1 : 200 @ A3
1:100 @ A1

Date

2019

Project No.

19-6059

Drawing No.

A102 / K

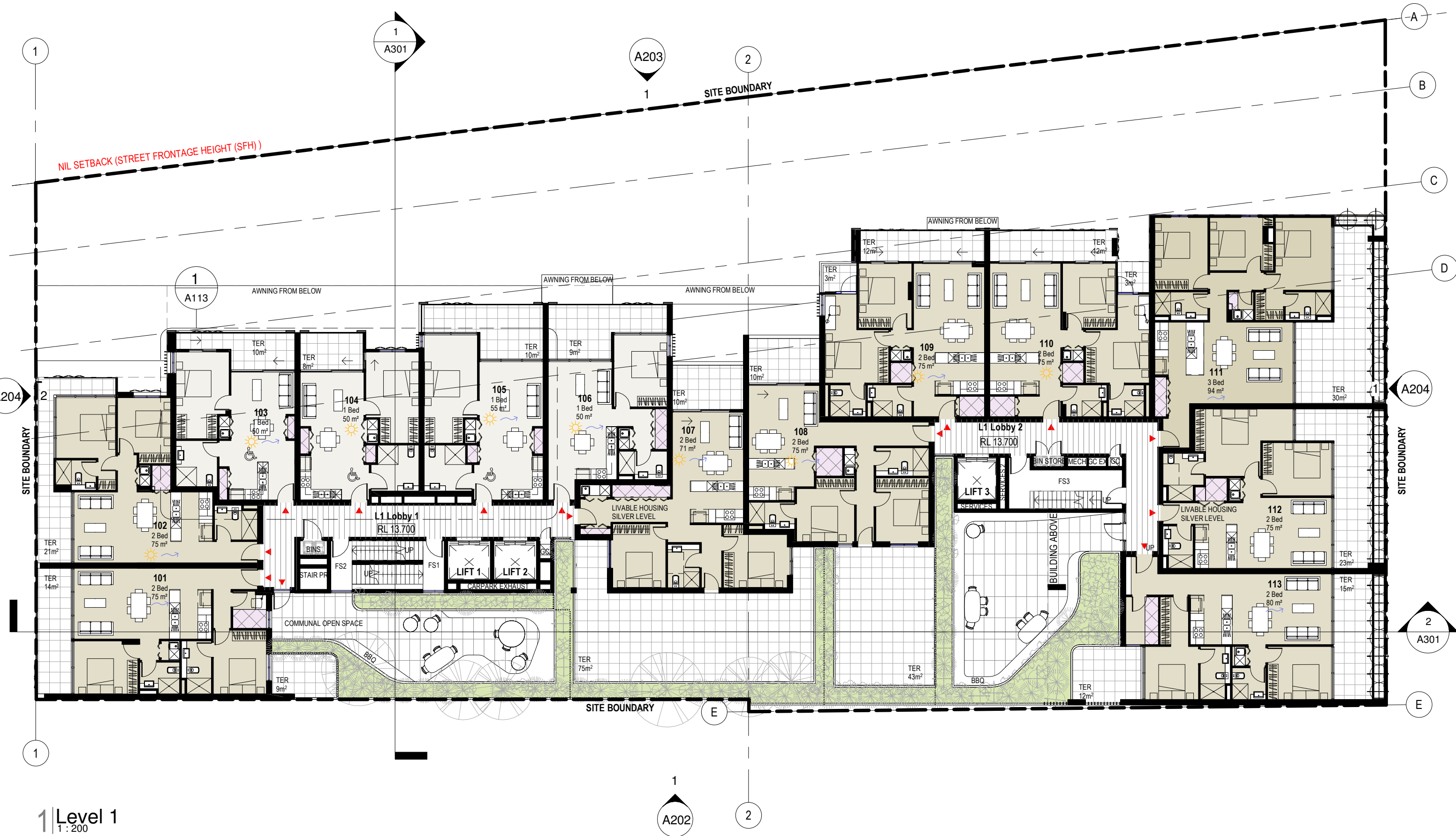
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1 Level 1
1 : 200

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<div><div>brewster murray</div><div></div></div> <div>Architecture Interiors Urban Design Project Management</div> <div>ABN 63 804 200 206 99 York Street Sydney NSW 2000 Australia +612 9299 0988 brewstermurray.com.au</div>	Rev	Issue	Date	Description	Consultants	Client	Project	Drawing	North	Scale	Date	Project No.	Drawing No.
		E	24.04.19	DA Submission	F. R. DEVELOPMENT	F. R. DEVELOPMENT	Mixed Use Development 264-268 Keira St & 23 Kenny St, Wollongong	Podium Level 1		1 : 200 @ A3 1:100 @ A1	2020	19-6059	A104 / K
		F	19.07.19	DA Resubmission									
		G	25.19.19	Issue for Coordination									
		H	22.10.19	Issue for Coordination									
		I	08.01.19	Issue for DA RFI									
	J	21.02.20	Issue for Consultants										
	K	25.03.20	DRP Revision									Issued for DA	
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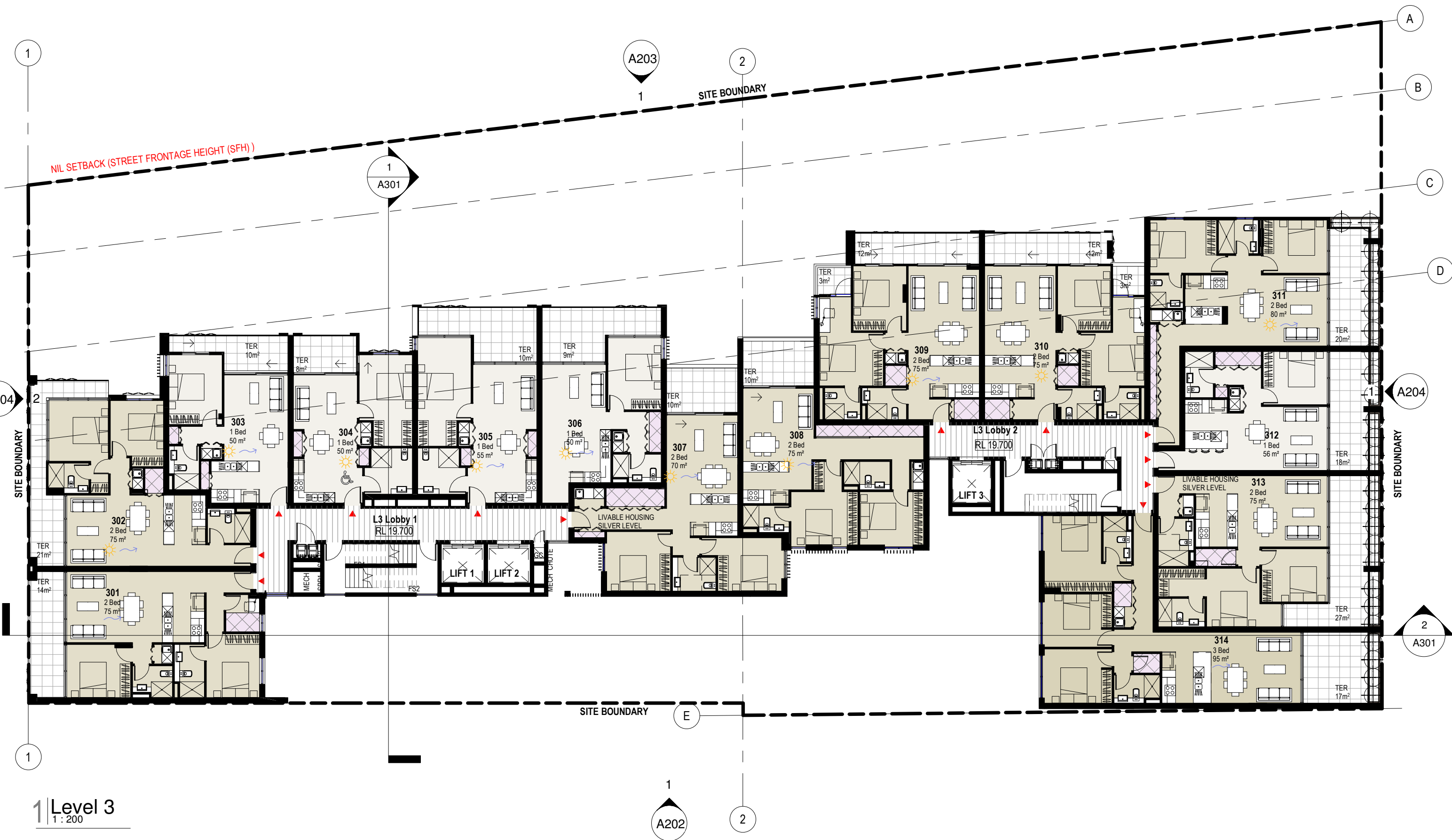
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1 | Level 3
1 : 200

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Rev		
Issue	Date	Description
A	22.10.19	Issue for Coordination
B	08.01.19	Issue for DA RFI
C	21.02.20	Issue for Consultants
D	25.03.20	DRP Revision

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Podium Level 3

North



Scale

1 : 200 @ A3
1:100 @ A1

Date

2020

Project No.

19-6059

Drawing No.

A106 / D

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DA

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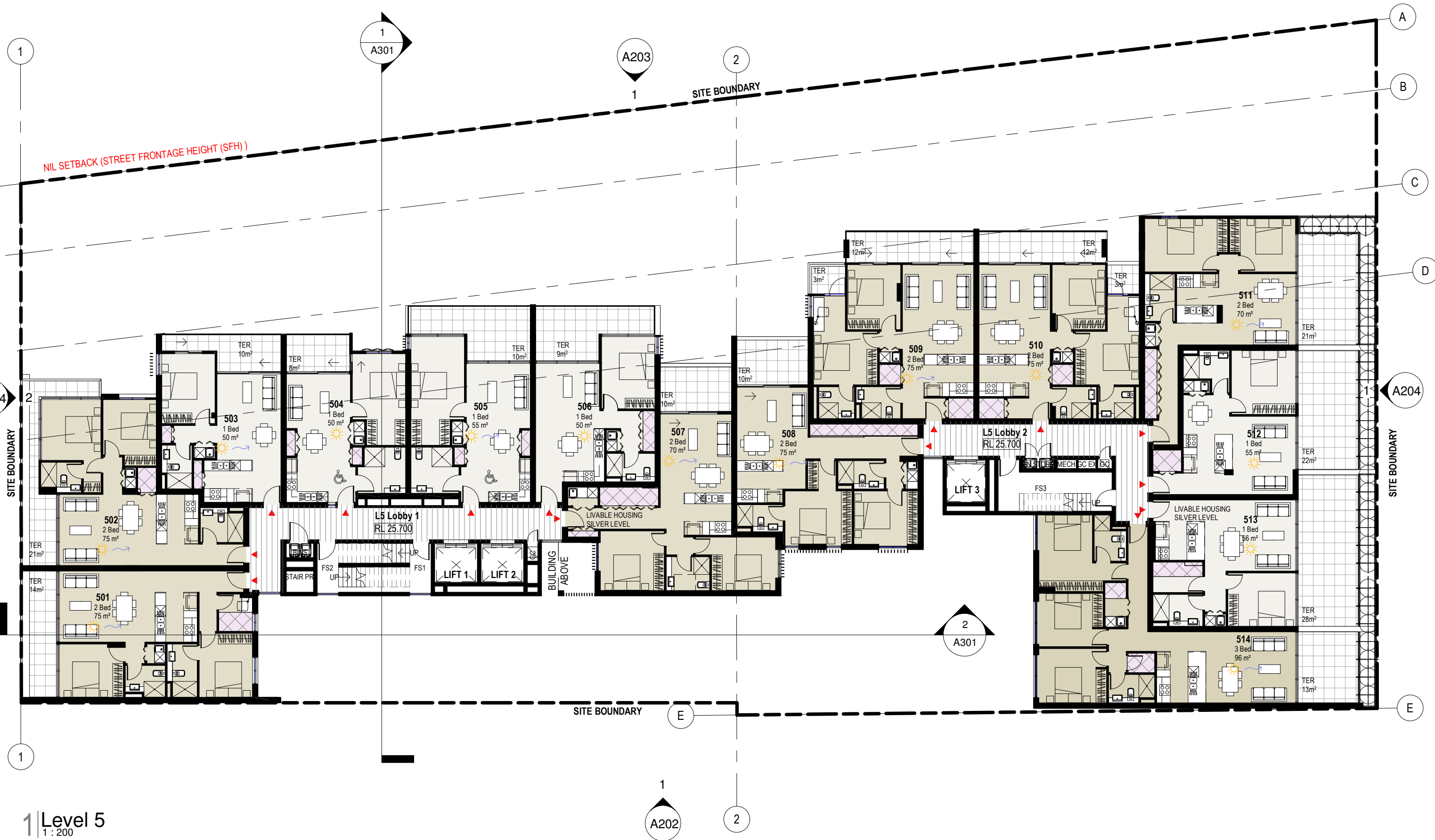
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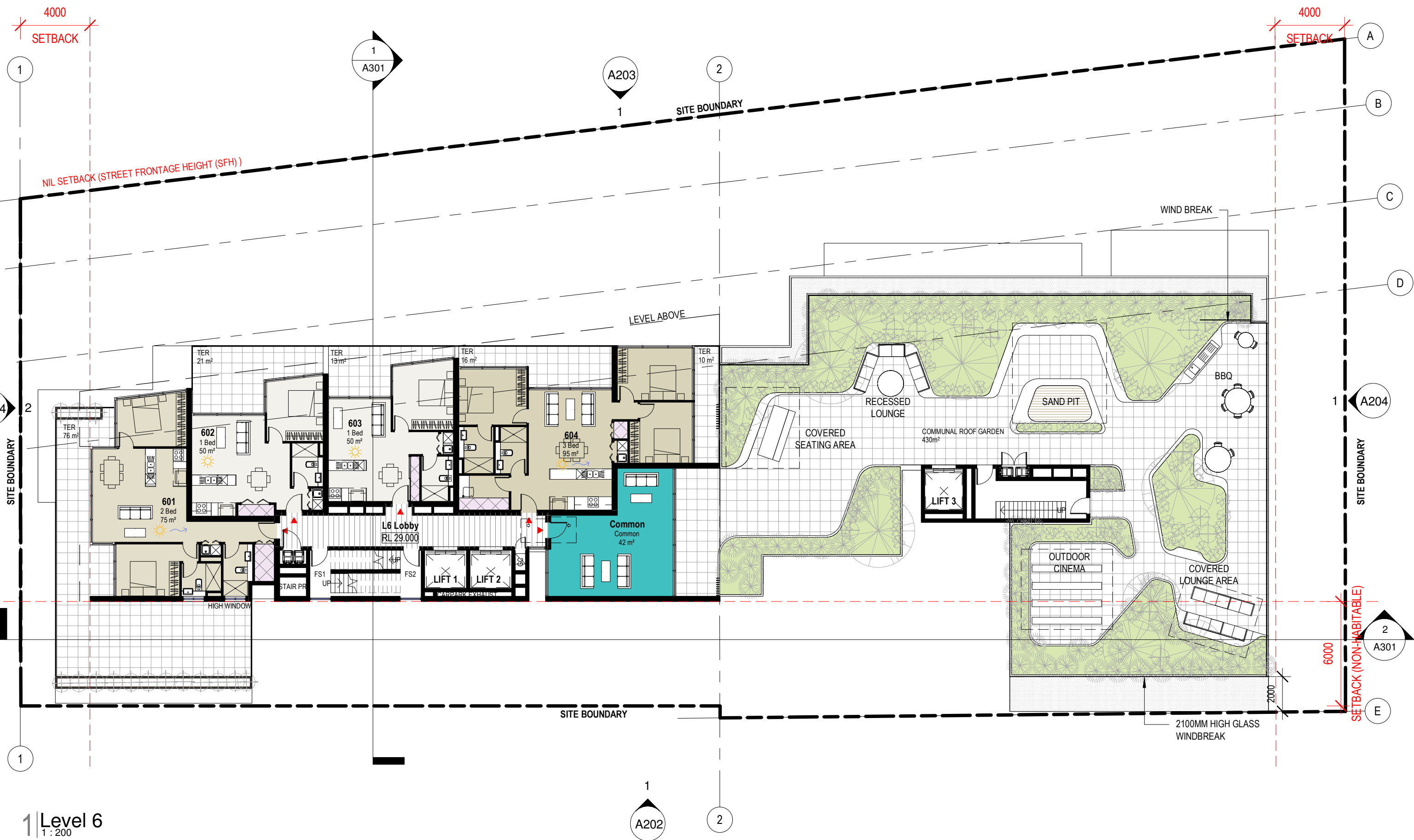


1 Level 5
1 : 200

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1 Level 6
1 : 200

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Rev	Issue	Date	Description
E	24.04.19	DA Submission	
F	19.07.19	DA Resubmission	
G	25.19.19	Issue for Coordination	
H	22.10.19	Issue for Coordination	
I	08.011.19	Issue for DA RFI	
J	21.02.20	Issue for Consultants	
K	25.03.20	DRP Revision	

Consultants

Client
F. R. DEVELOPMENT

Project
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

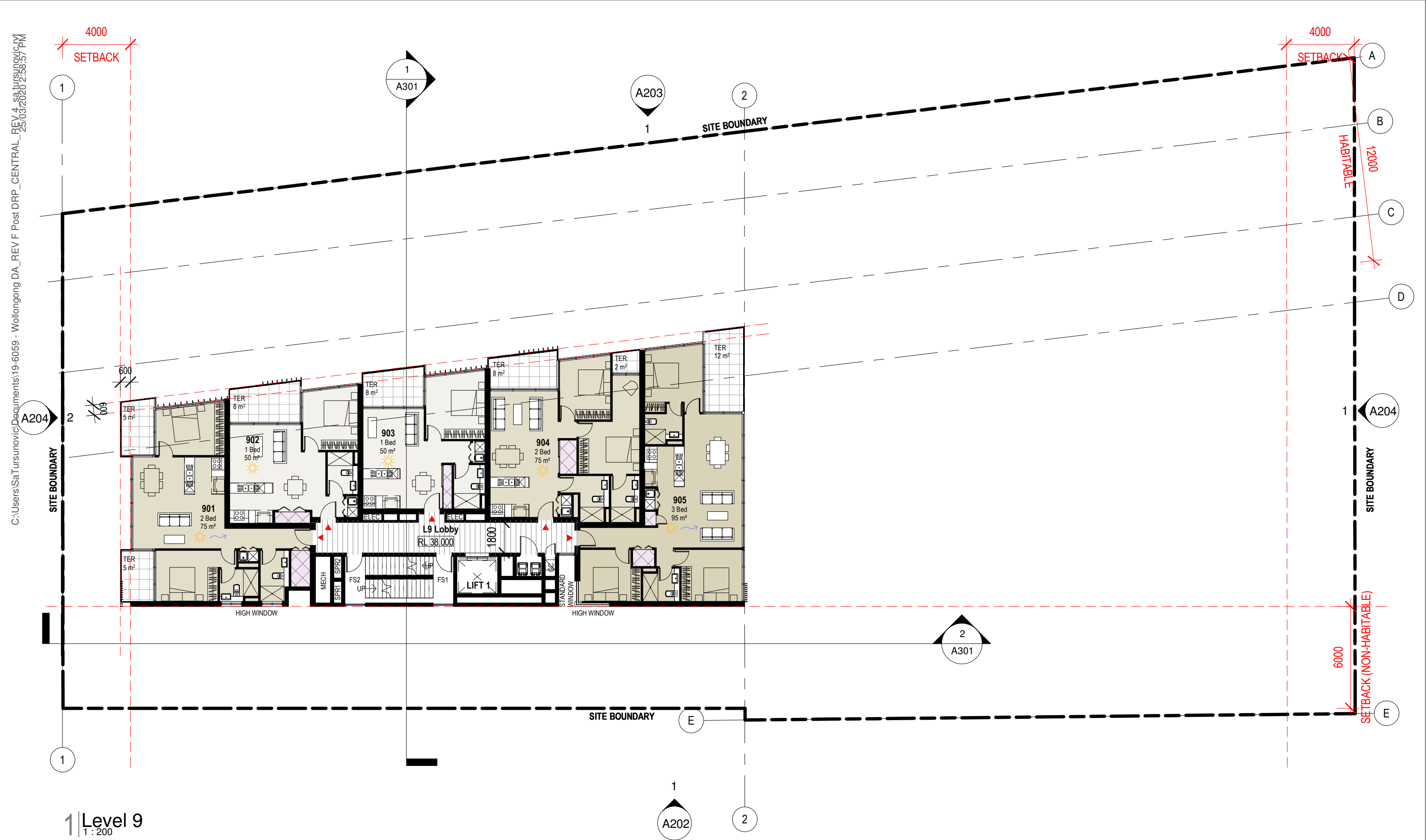
Drawing
Tower Level 6

North	Scale	Date	Project No.	Drawing No.
1 : 200 @ A3 1:100 @ A1	2020	19-6059	A109 / K	

Issued for
DA

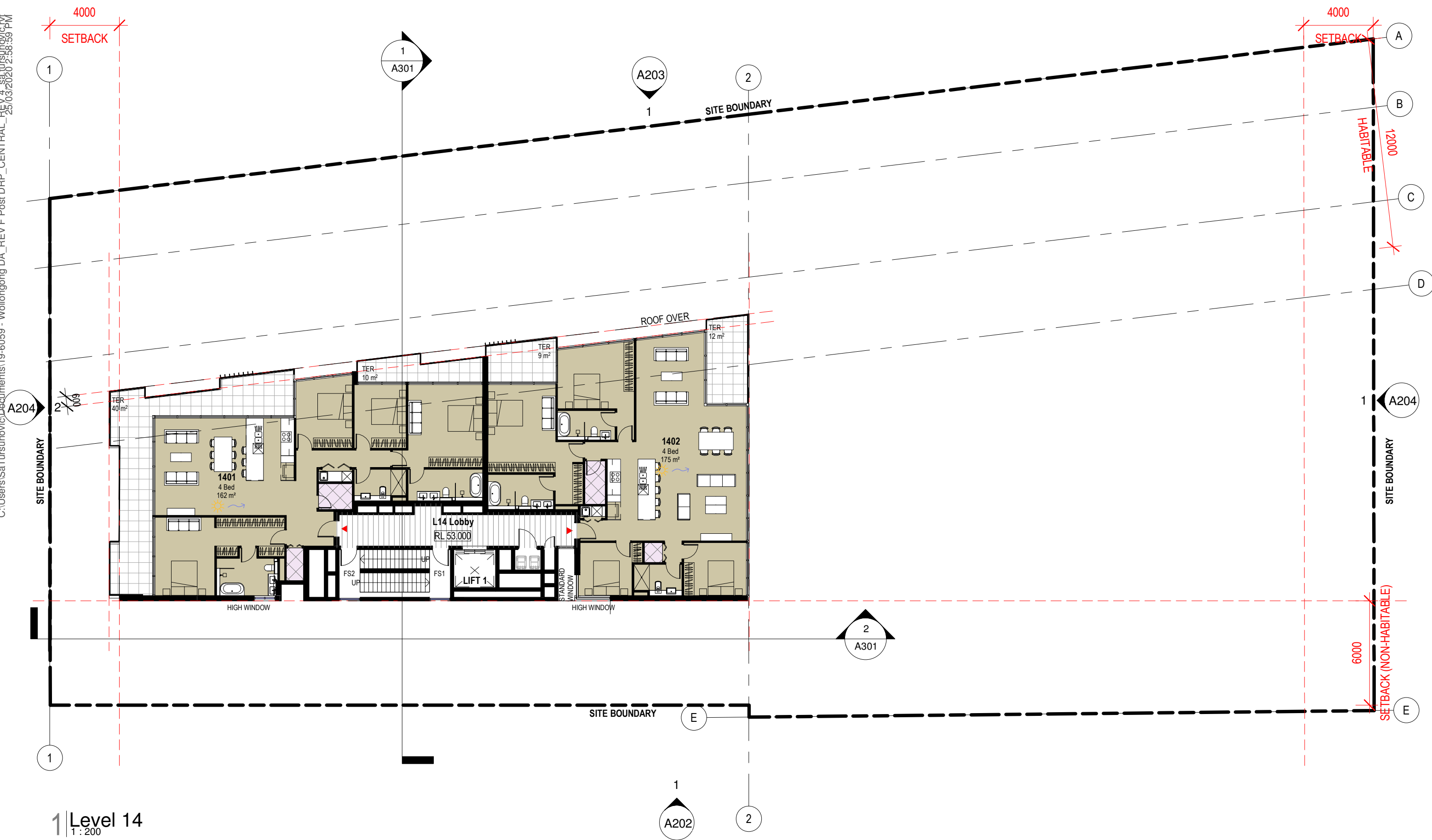
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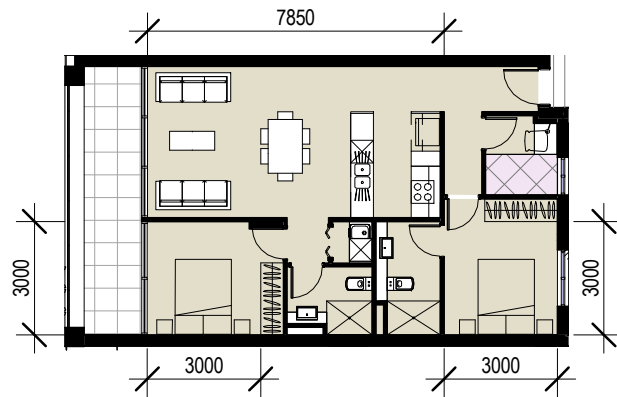
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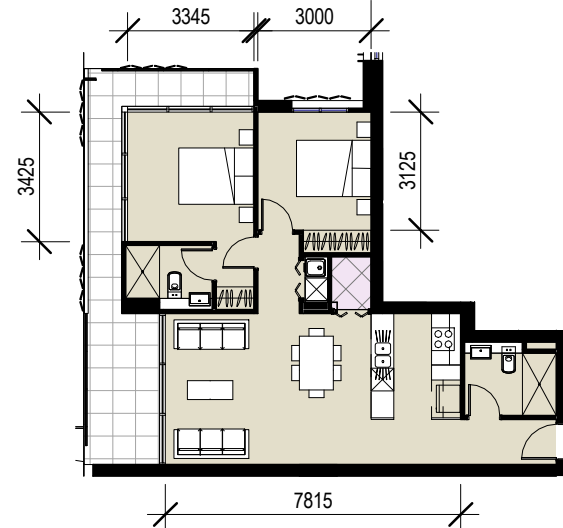
ALL PROPOSED APARTMENTS COMPLY WITH ADG DIMENSION GUIDELINES

<div>brewster murray</div> <div></div>		Rev		Consultants		Client		Project		Drawing		North	Scale	Date	Project No.	Drawing No.	
Architecture Interiors Urban Design Project Management		Issue	Date	Description		F. R. DEVELOPMENT		Mixed Use Development 264-268 Keira St & 23 Kenny St, Wollongong		Tower Level 14			1 : 200 @ A3	2020	19-6059	A111 / 1	
		C	04.03.19	Preliminary Issue									1:100 @ A1				
		D	29.03.19	Preliminary Issue													
		E	24.04.19	DA Submission													
		F	19.07.19	DA Resubmission													
ABN 63 804 200 206 99 York Street Sydney NSW 2000 Australia +612 9299 0988		G	22.10.19	Issue for Coordination													
		H	08.01.19	Issue for DA RFI													
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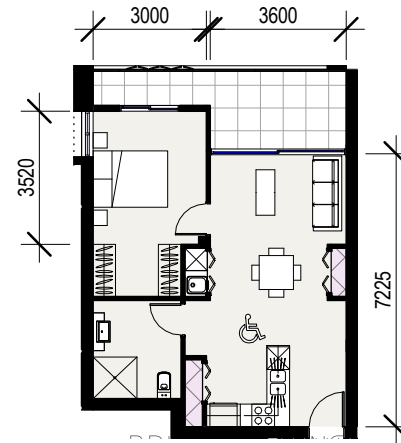
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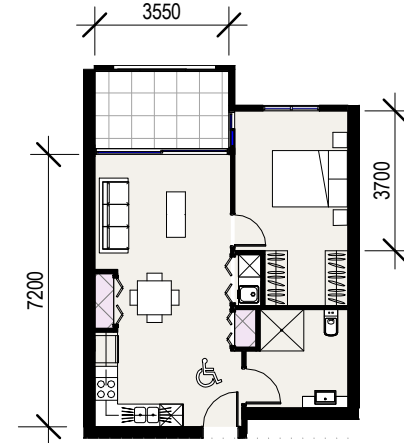
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1:200



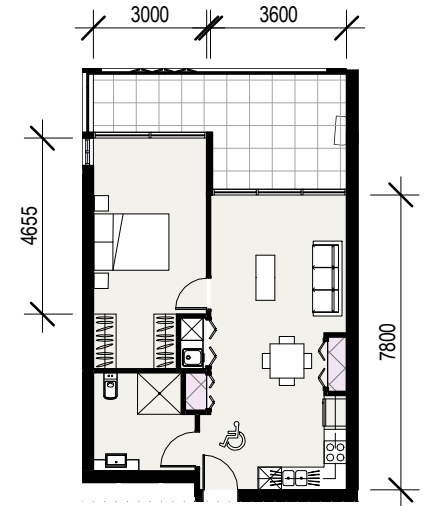
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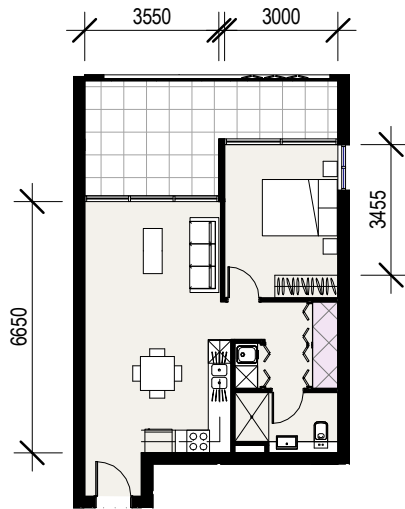
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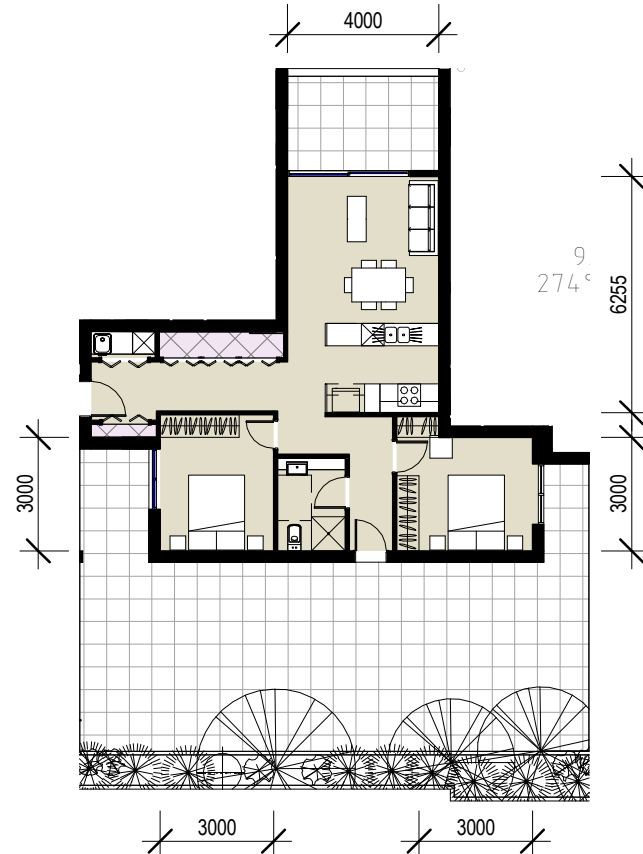
4 | U104, 204, 304, 404, 504
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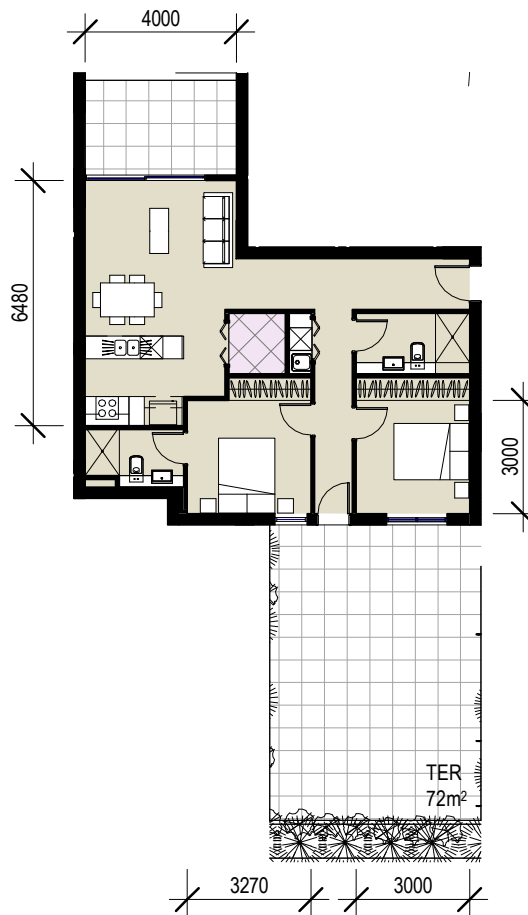
5 | U105, 205, 305, 405, 505
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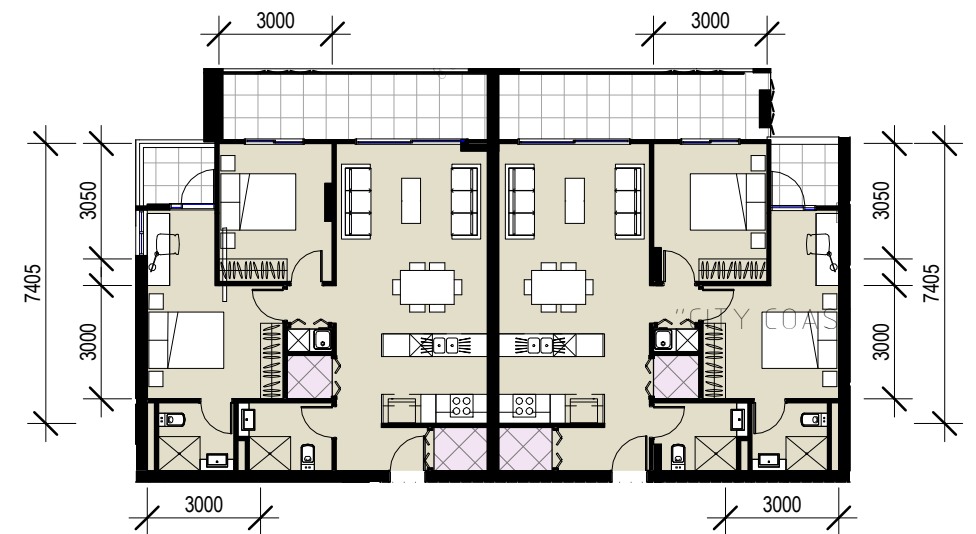
6 | U106, 206, 306, 406, 506
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7 | U107
1:200



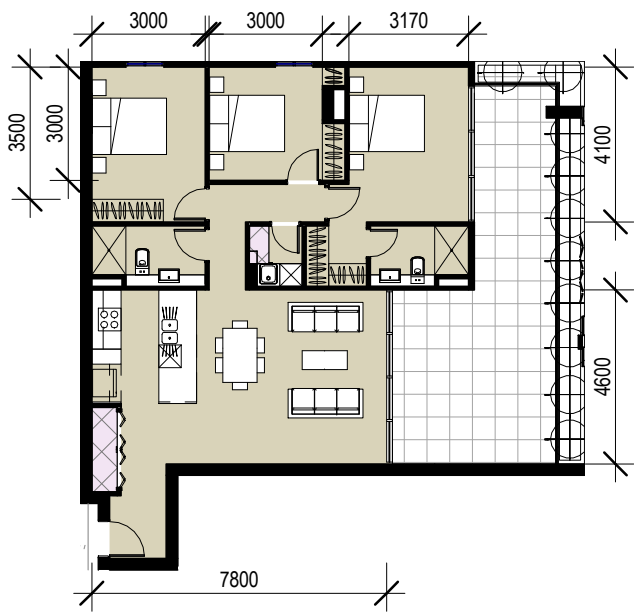
8 | U108
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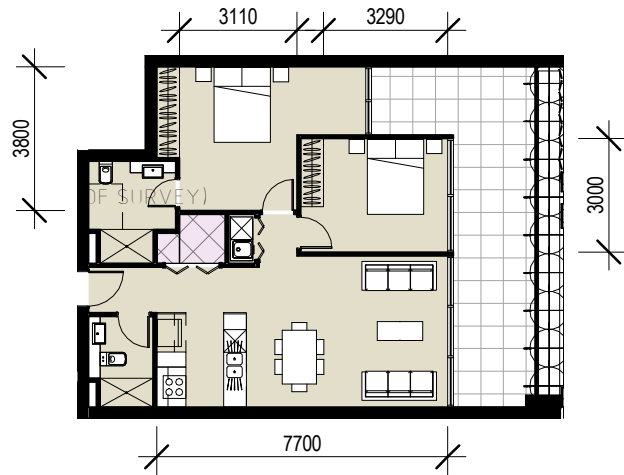
9 | U109/110, 209/210, 309/310, 409/410, 509/510



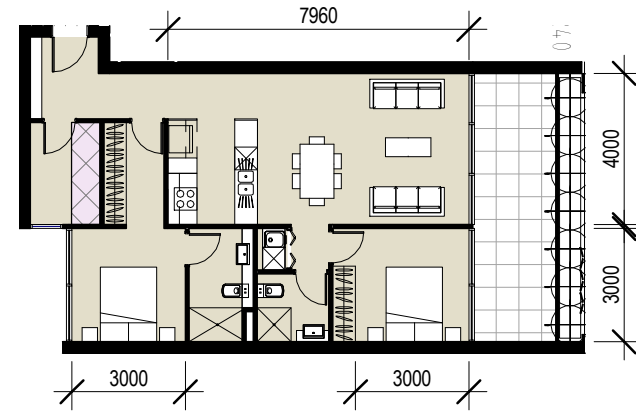
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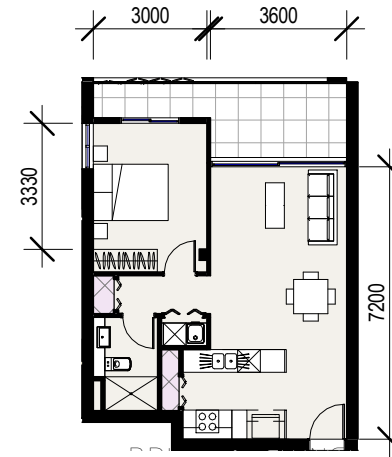
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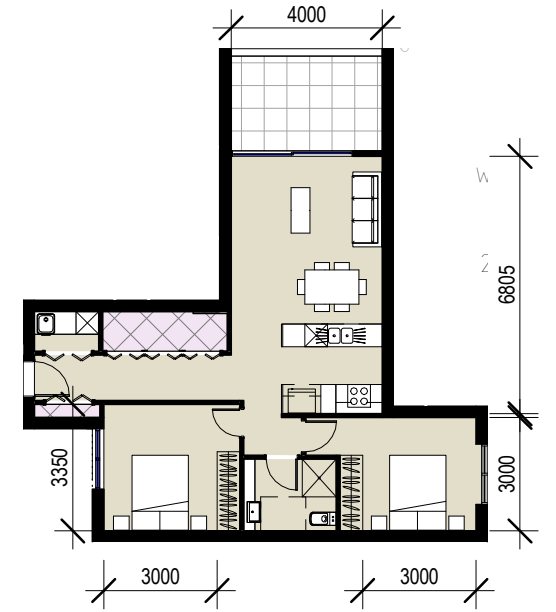
2 | U112, 212
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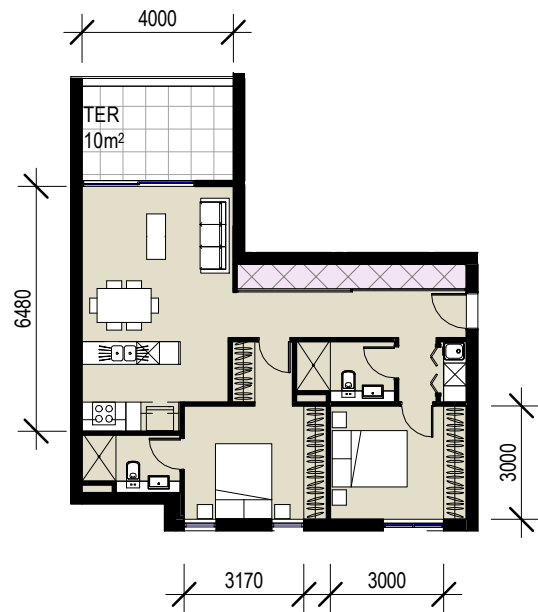
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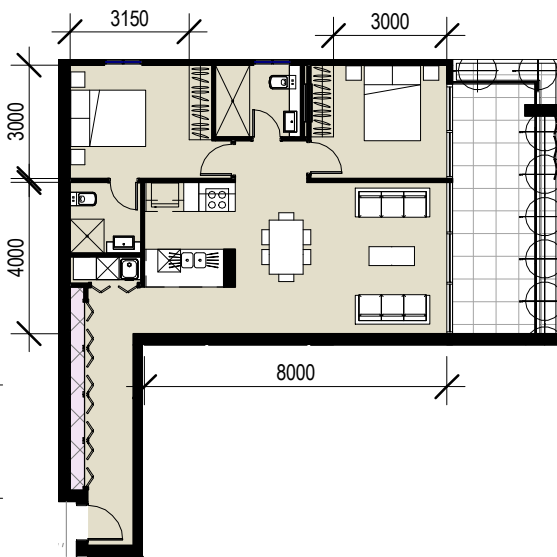
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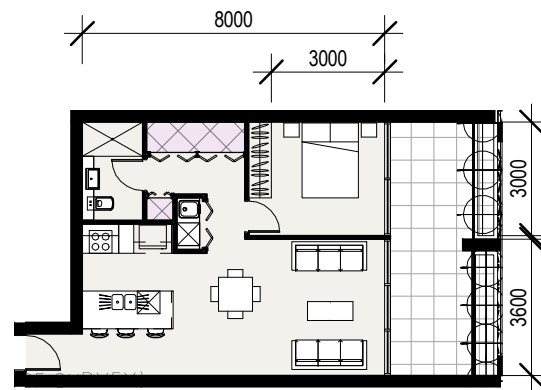
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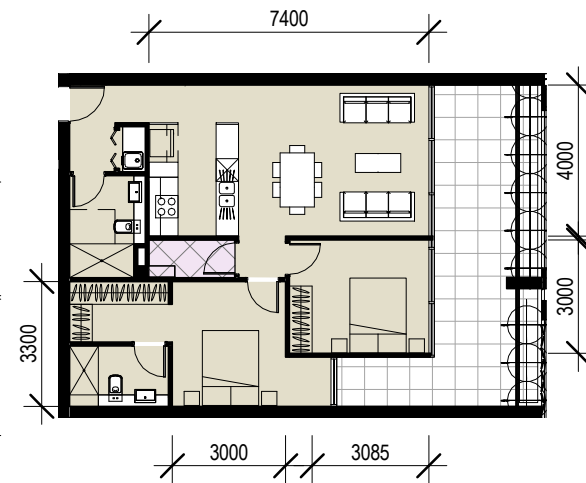
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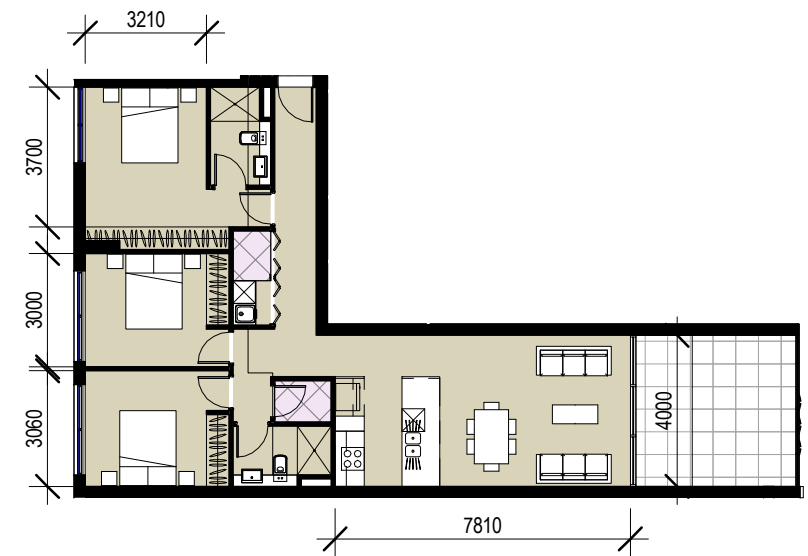
7 | U311, 411
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8 | U312, 412
1 : 200

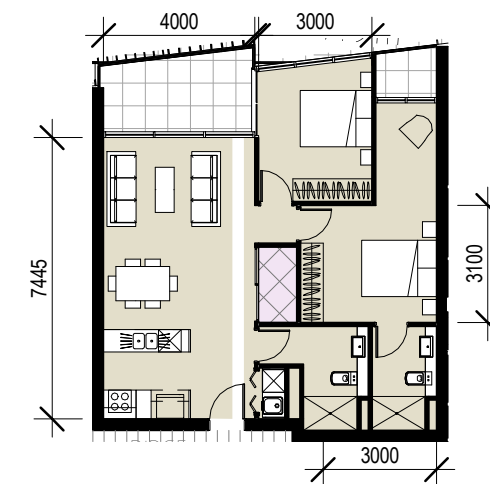
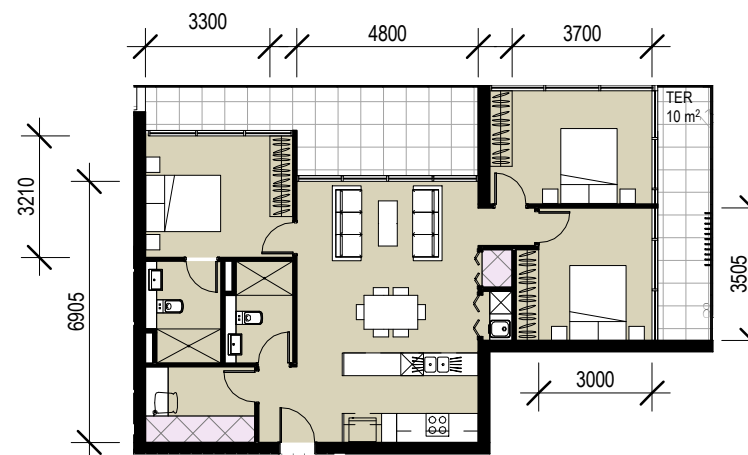
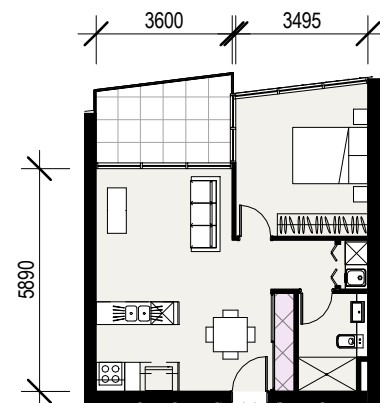
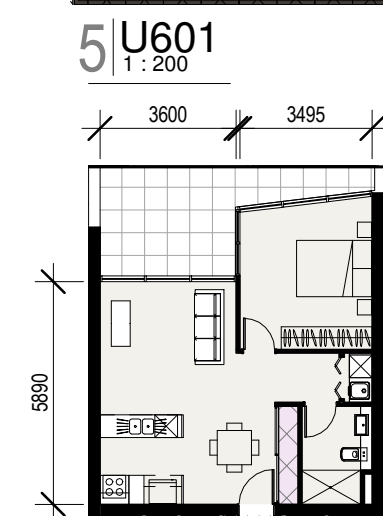
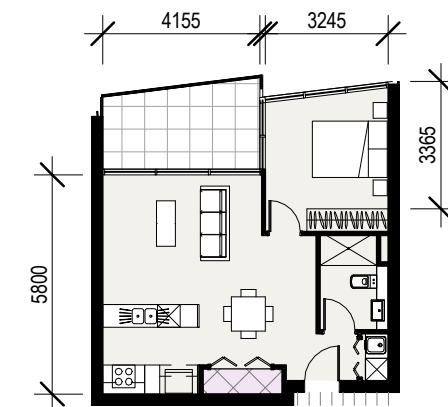
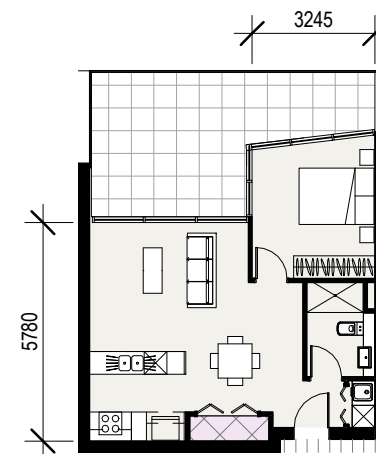
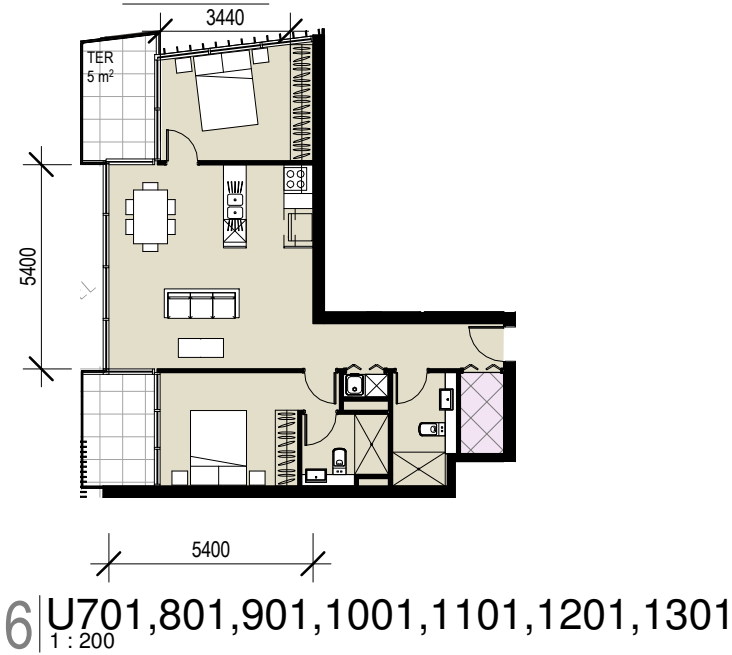
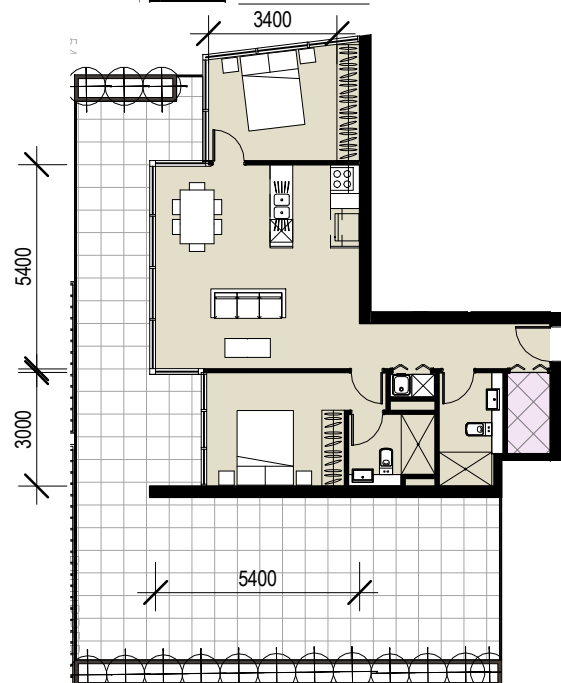
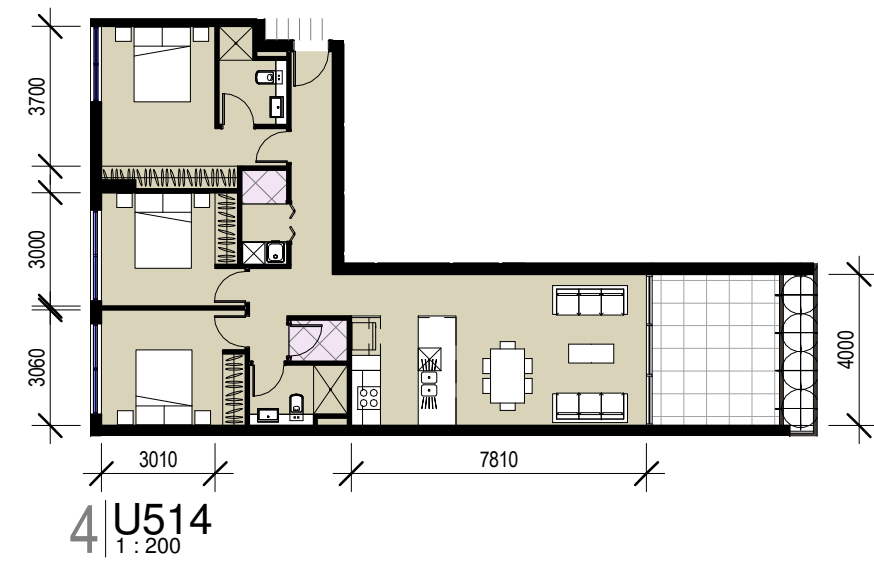
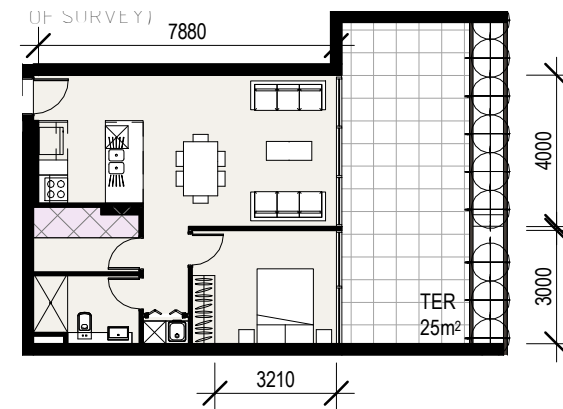
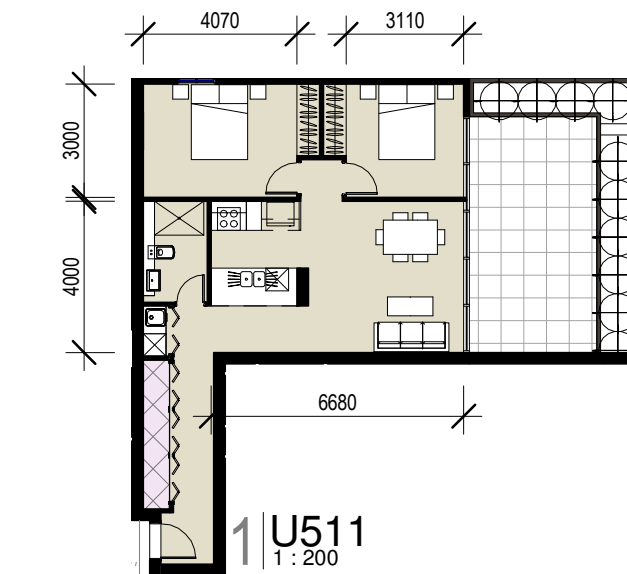


9 | U313, 413
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10 | U314, 414
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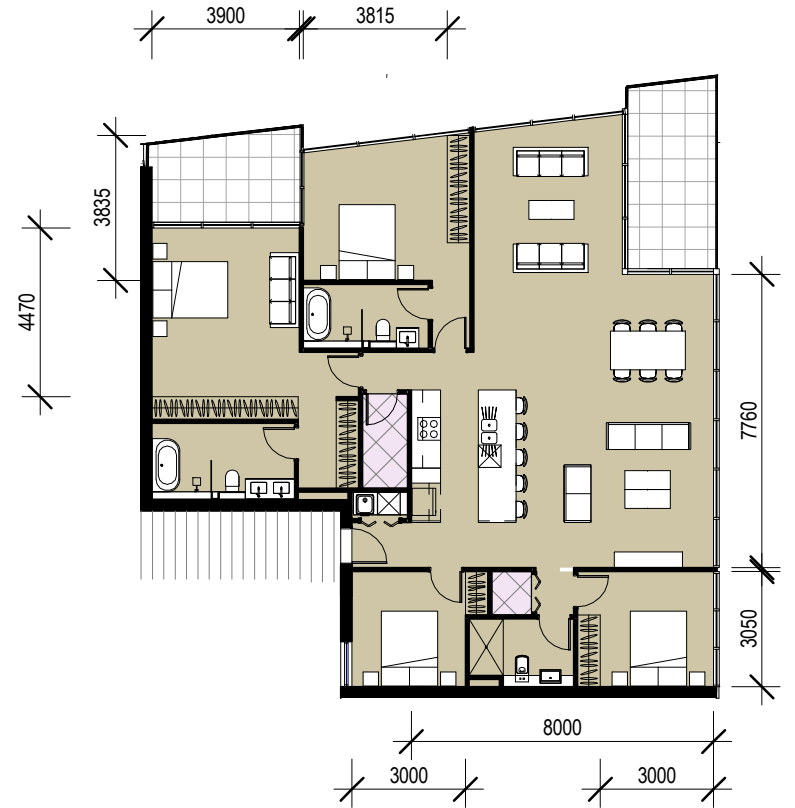
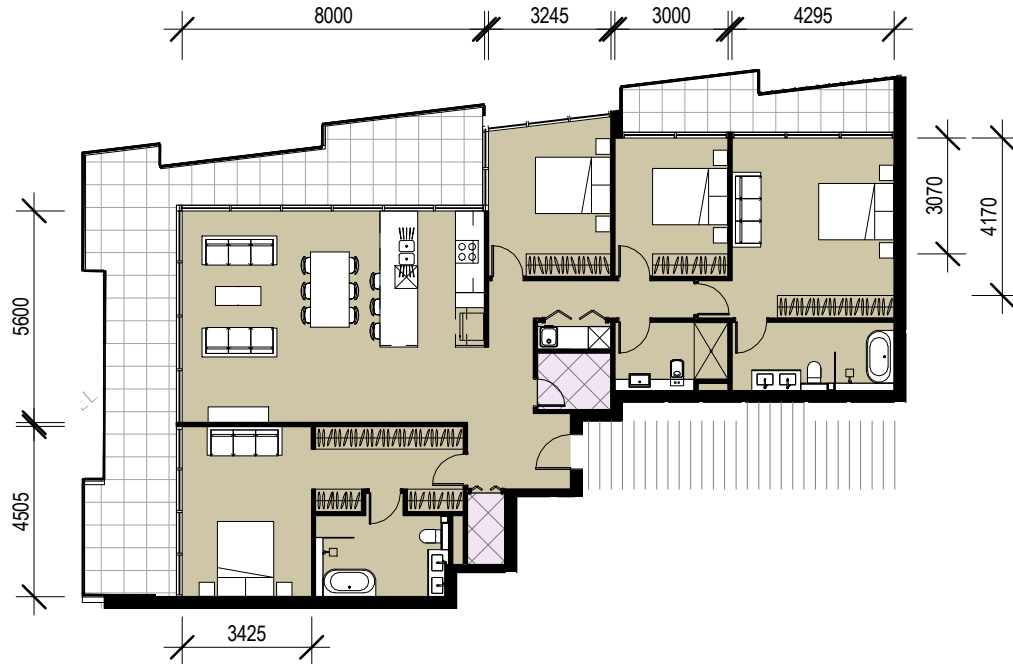
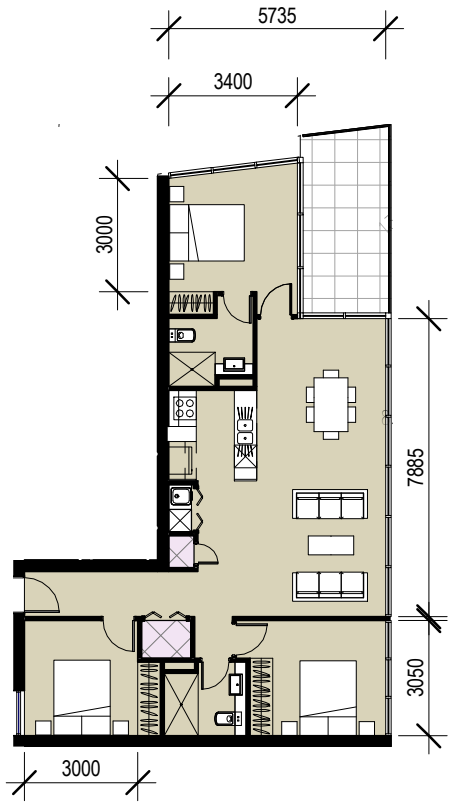
9 | U603
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10 | U703, 803, 903, 1003, 1103, 1203, 1303
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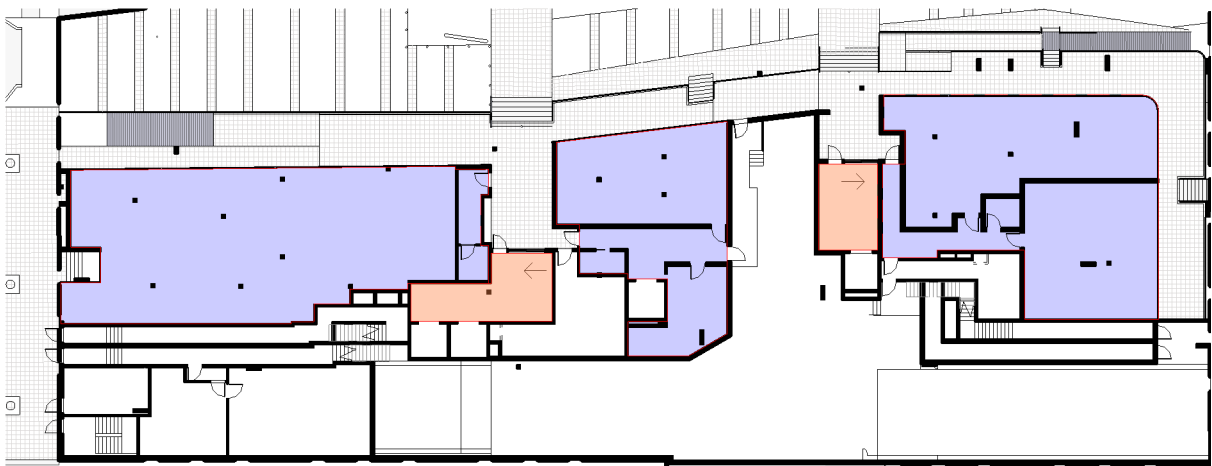
11 | U604
1 : 200

12 | U704, 804, 904, 1004, 1104, 1204, 1304
1 : 200

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25/03/2020 3:03:29 PM



1 Ground Floor

1 : 500

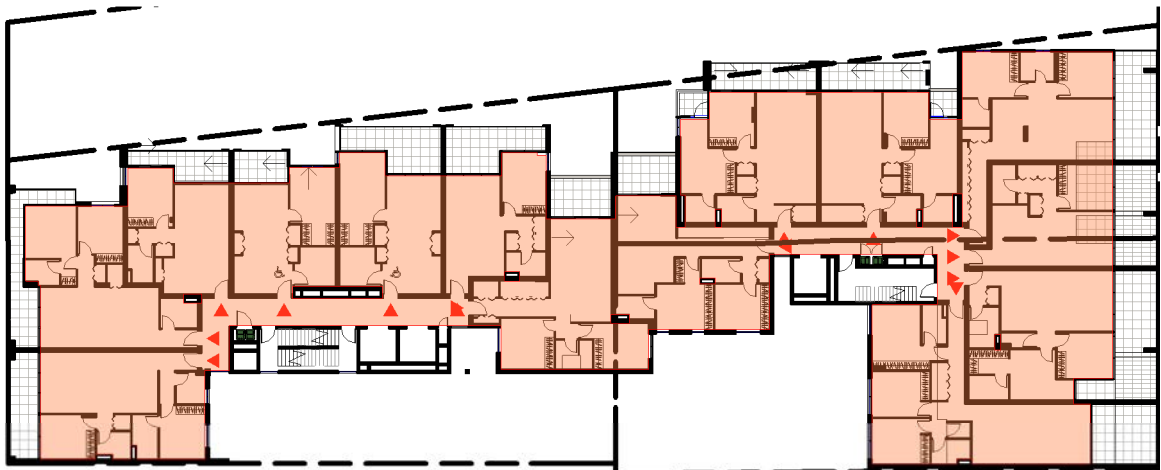
GFA = Commercial 605.75 sqm
Residential 55 sqm



2 Level 1 - 2 GFA

1 : 500

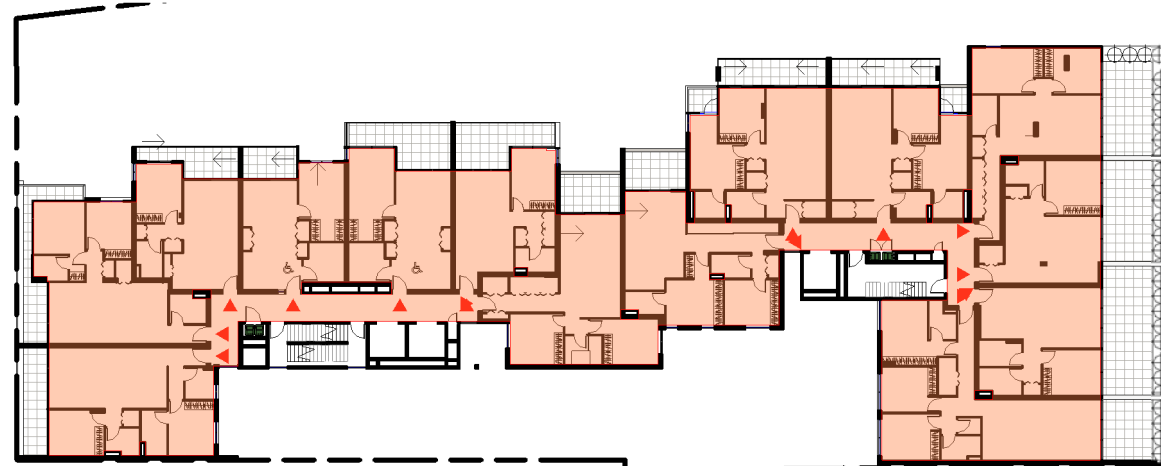
GFA = 1015 x 2
= 2030m²



3 Level 3 - 4 Typical

1 : 500

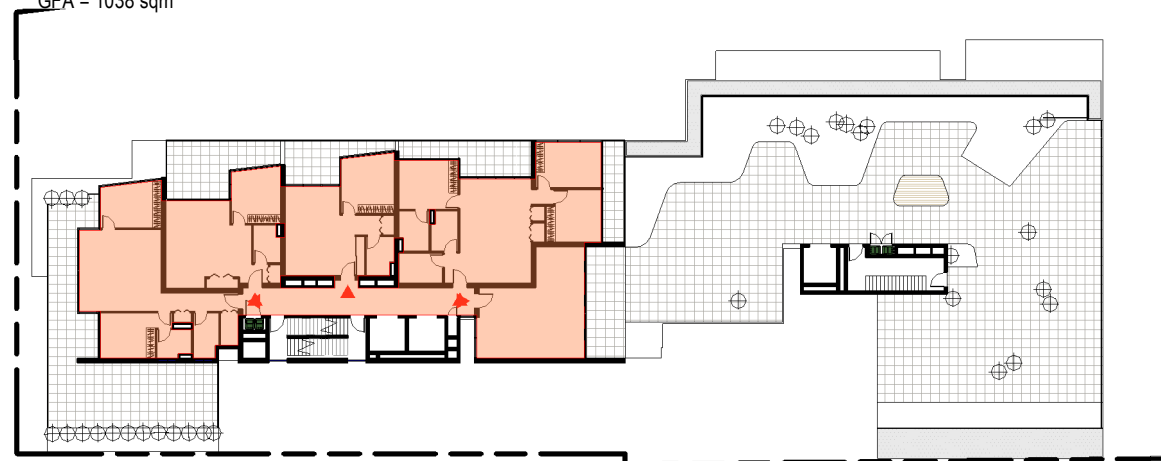
GFA = 1069 x 2 sqm
= 2138m²



4 Level 5 GFA

1 : 500

GFA = 1038 sqm



5 Level 6 GFA

1 : 500

GFA = 349 sqm



6 Level 7 - 13 Typical GFA

1 : 500

GFA = 378 x 7levels sqm
= 2646 sqm



7 Level 14

1 : 500

GFA = 368 sqm

KEY

- Non-Residential Floor Space
- Residential Floor Space

GFA / FSR

Floor Space Ratio

PERMITTED FSR CALCULATION

Site Area = 2586sqm
Total GFA Proposed = 9230sqm
Total Residential GFA = 8624sqm (93.4%)
Total Non-Residential GFA = 605sqm (6.6%)

$(6 \times 6.6 / 100) + (3.5 \times 93.4 / 100)$
 $0.396 + 3.269$

Total Permitted FSR = **3.66:1**

PROPOSED FSR CALCULATION

NOTE: 16 Additional car park spaces provided
which add 220m² to total GFA

Total Proposed GFA WITH additional car spaces
= 9230+220
= 9450m²

Therefore
Total FSR = **9450 / 2586**
= 3.65
= COMPLIANT

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Rev

Issue	Date	Description
C	04.03.19	Preliminary Issue
D	29.03.19	Preliminary Issue
E	24.04.19	DA Submission
F	19.07.19	DA Resubmission
G	22.10.19	Issue for Coordination
H	08.01.19	Issue for DA RFI
I	25.03.20	DRP Revision

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

GFA Calculations

North



Scale

1 : 500 @ A3

Date

2020

Project No.

19-6059

Drawing No.

A501 / I

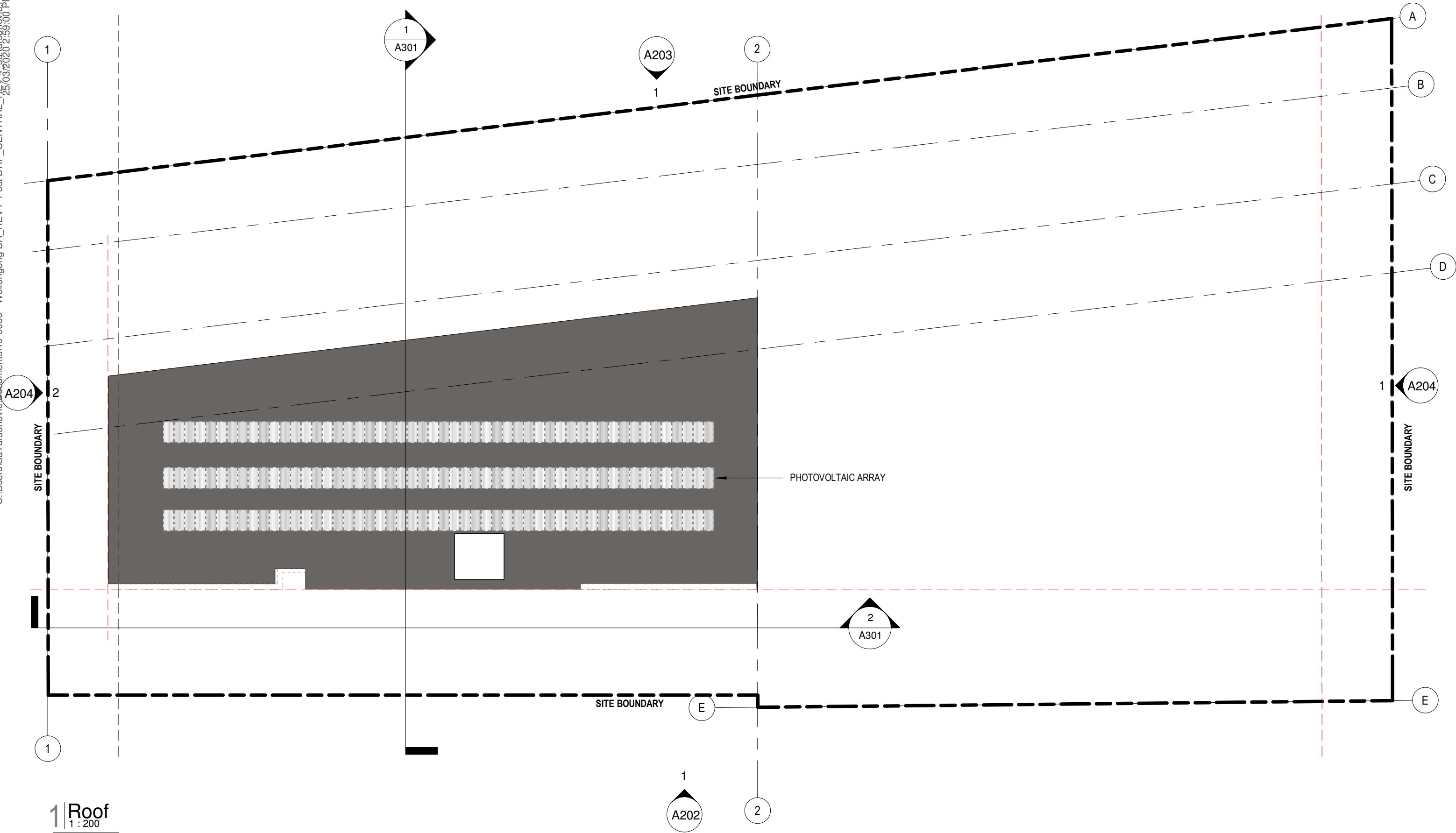
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1 | Roof
1 : 200



Rev		
Issue	Date	Description
A	22.10.19	Issue for Coordination
B	08.01.19	Issue for DA RFI

Consultants

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264-268 Keira St & 23
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Drawing
Roof Plan

North	Scale	Date	Project No.	Drawing No.
	1 : 200 @ A3 1:100 @ A1	2019	19-6059	A112 / B
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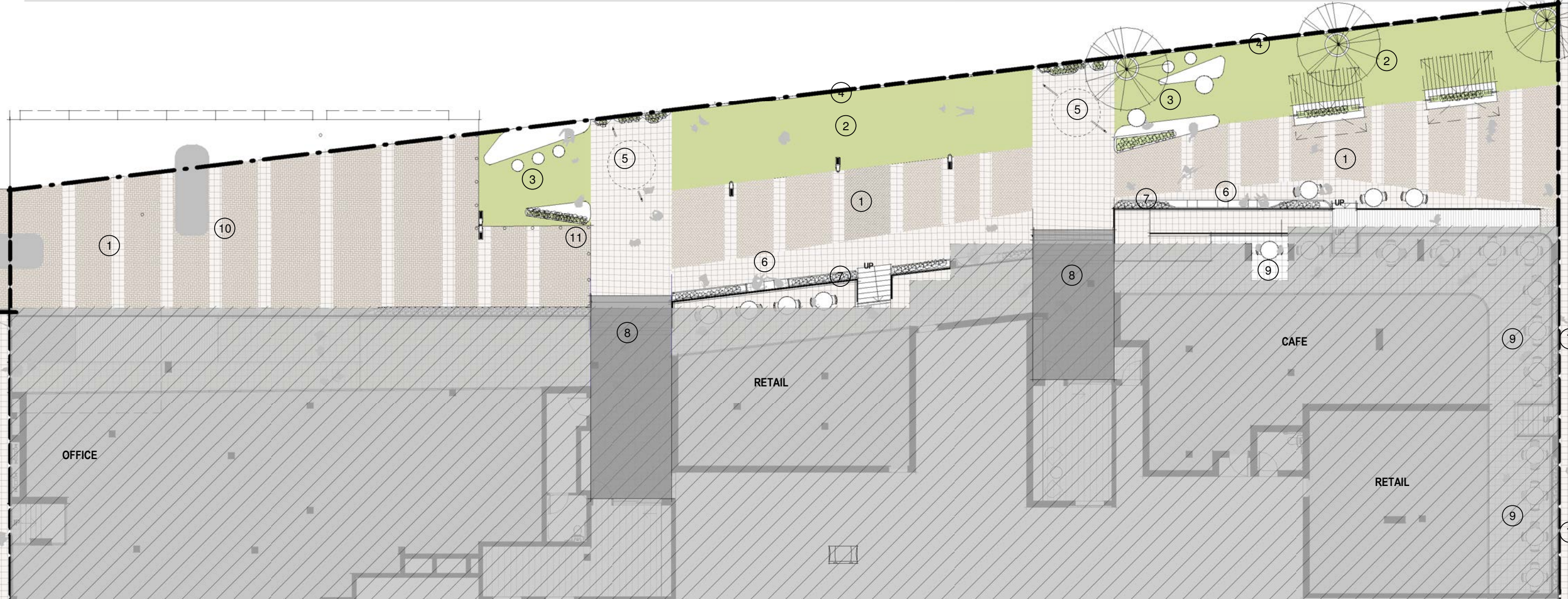
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KENNY STREET

KEIRA STREET

LEGEND

- 1 An interplay of floor finishes guide pedestrians through the lane. Footway pavers define a circulation route and highlight residential entrances.
- 2 Grassed area off of the lane softens the hardscape and invites a place of pause, play and activity.
- 3 Seating nooks within pockets of grassed areas create zones where residents, visitors and pedestrians can meet and mingle.
- 4 A temporary green wall livens the blank facades of neighbouring buildings and acts as an extension of the grassed areas. Green walls to be removed in future to allow new developments to respond to the lane.
- 5 Statement artworks highlight residential entrances and act as place makers. They inform the access points onto the raised level of the laneway. They also lead to and define to the pockets of activity within the grassed area.
- 6 Cafe seating along the laneway connects the activities from the raised retail zones with the street level. It mitigates the raised ground floor and provides activates the building frontage.
- 7 Integrated planter boxes provide a place of pause along the lane. They also mitigate the height difference between the lane and the raised commercial spaces/ residential entrances.
- 8 Awnings extend beyond the building line to visually accentuate the recessed residential entries from the laneway.
- 9 Cafe seating activates the Keira St frontage and invites pedestrians onto the site.
- 10 An extension of the laneway floor treatment across the parking easement blurs the boundaries between the two zones to create a cohesive and singular lane.
- 11 Bollards mediate between the parking easement and laneway, providing security without obstructing the flow of people through the ground plane.



DRIVEWAY PAVERS
TRUPAVE - CHARCOAL - HONED -
HERRINGBONE PATTERN



FOOTWAY PAVERS
STRADAPAVE - DARK GREY -
HONED



GRASSED AREA
TO BE USED IN DEEP-
SOIL ZONES



VERTICAL GARDEN



STREET SCULPTURE
DESIGN TO BE RAISED OFF GROUND AND HAVE
MINIMUM CONTACT WITH GROUND PLANE



AWNING
VINES TO BRING IN NATURAL ELEMENT AND
PROVIDE SHADE



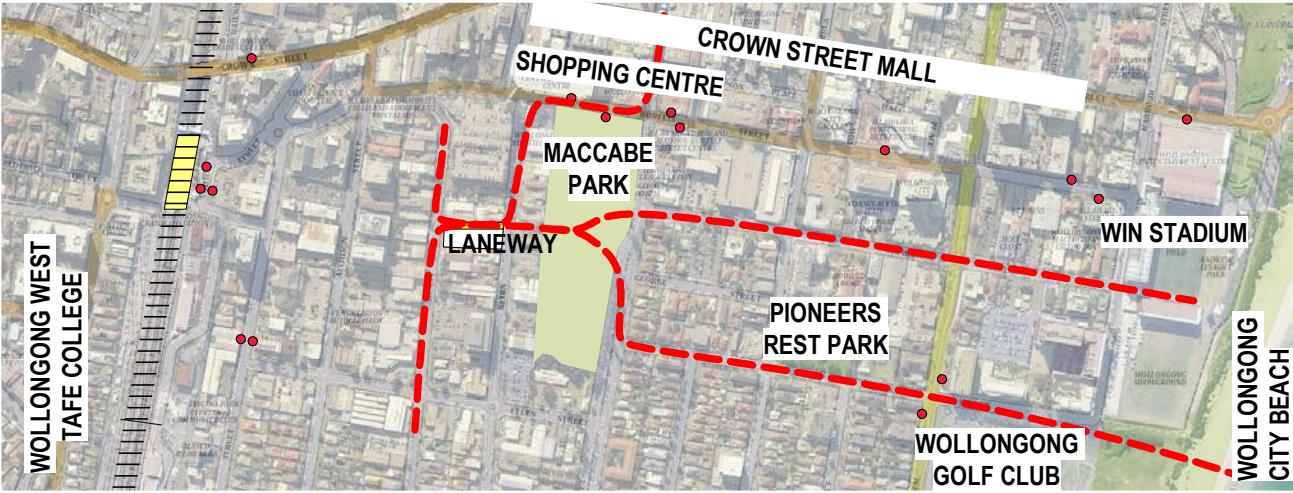
OPEN STAIRS
OPEN STAIRS FOR UNOBSTRUCTED
FLOW OF FLOODWATER



STREET FURNITURE
FURNITURE TO HAVE MINIMUM IMPACT ON GROUND PLANE.
SLATTED DESIGN THAT ALLOWS WATER TO PASS THROUGH.



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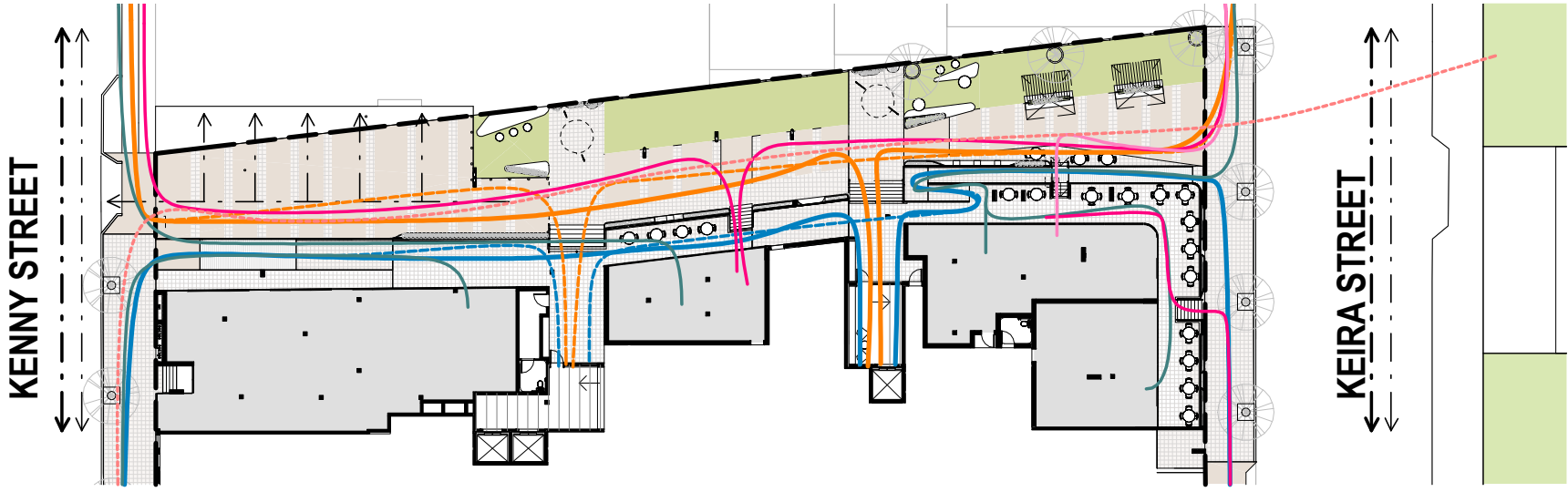


LANEWAY USE + USERS:
THE LANEWAY IS A LINK THAT CONVENIENTLY CONNECTS THE DEVELOPMENTS ALONG KENNY ST WITH MACCABE PARK, THE WOLLONGONG SHOPPING CENTRE, AND RECREATIONAL ACTIVITIES TO THE EAST.

- AS SUCH THE PRIMARY LANEWAY USERS Y ARE ENVISIONED TO BE:
- RESIDENTS OF DEVELOPMENT AND NEARBY DEVELOPMENTS (AND THEIR VISITORS)
 - WORKERS OF DEVELOPMENTS AND NEARBY DEVELOPMENTS (AND THEIR CUSTOMERS/ VISITORS)
 - MACCABE PARK VISITORS

1 Laneway - Potential Users

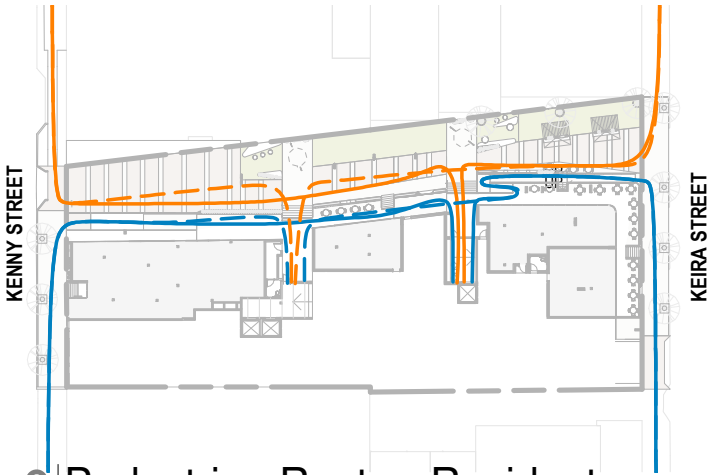
1 : 10000



- LEGEND**
- RESIDENT
 - RESIDENT ACCESSIBLE
 - WORKERS/ EMPLOYEES
 - WORKERS ACCESSIBLE
 - PASSER BY ROUTE
 - LIGHT VEHICULAR TRAFFIC
 - TRAFFIC

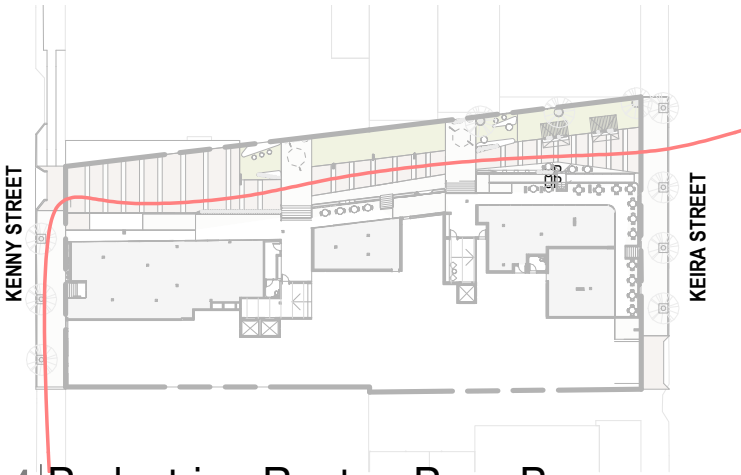
2 Combined Pedestrian Activity

1 : 500



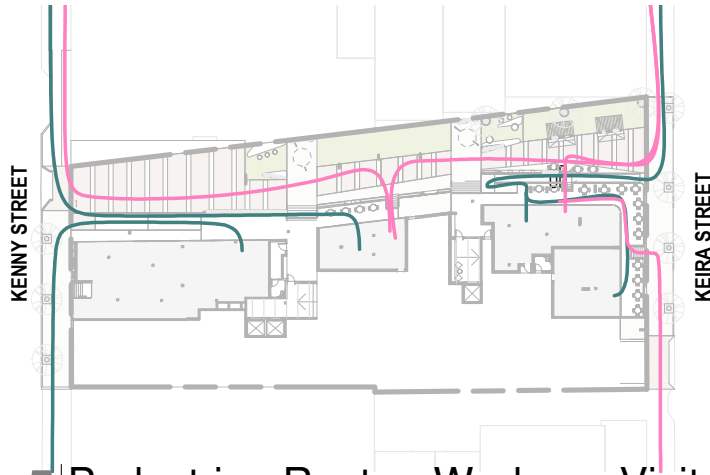
3 Pedestrian Route - Residents

1 : 1000



4 Pedestrian Route - Pass By

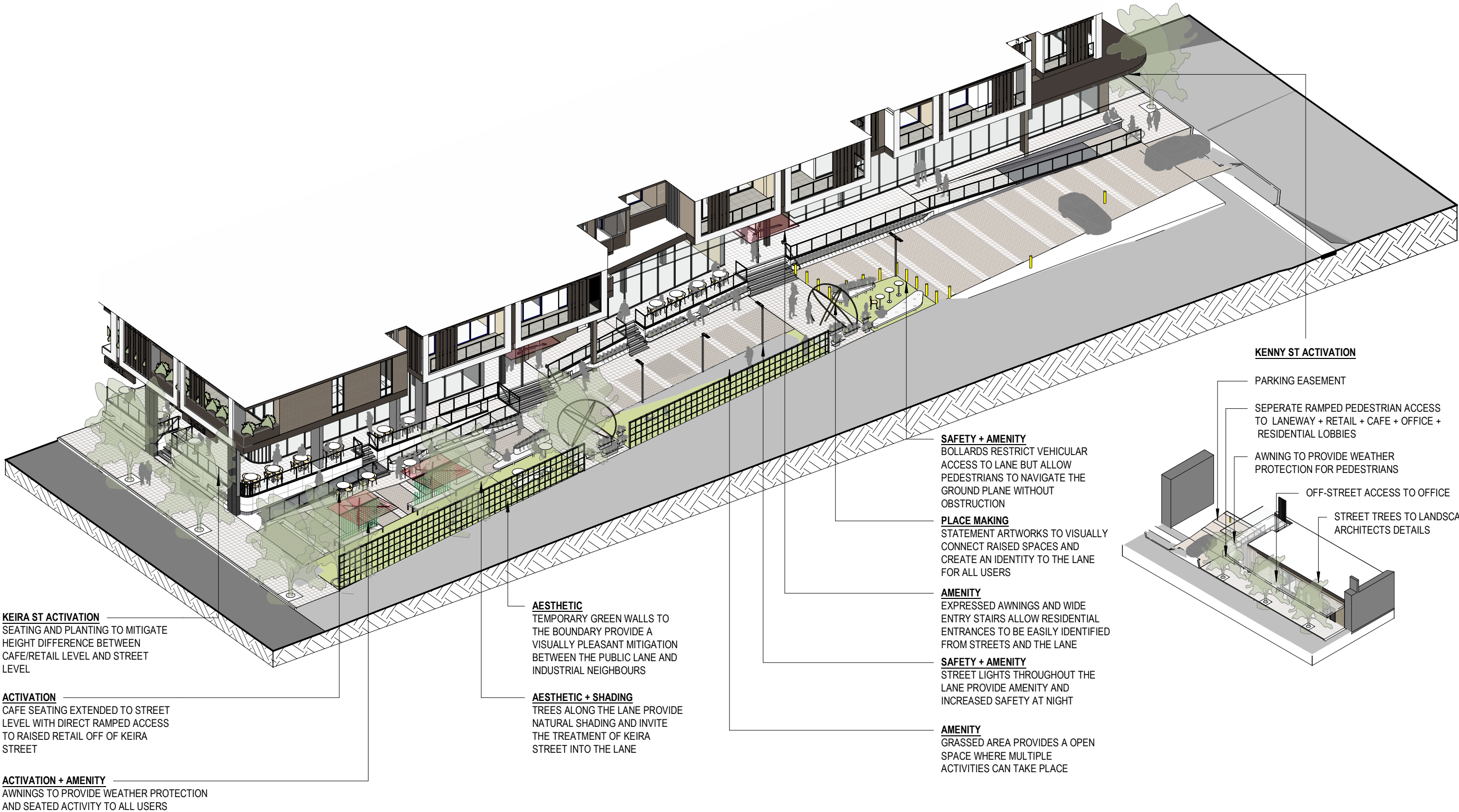
1 : 1000



5 Pedestrian Route - Workers+Visitors

1 : 1000

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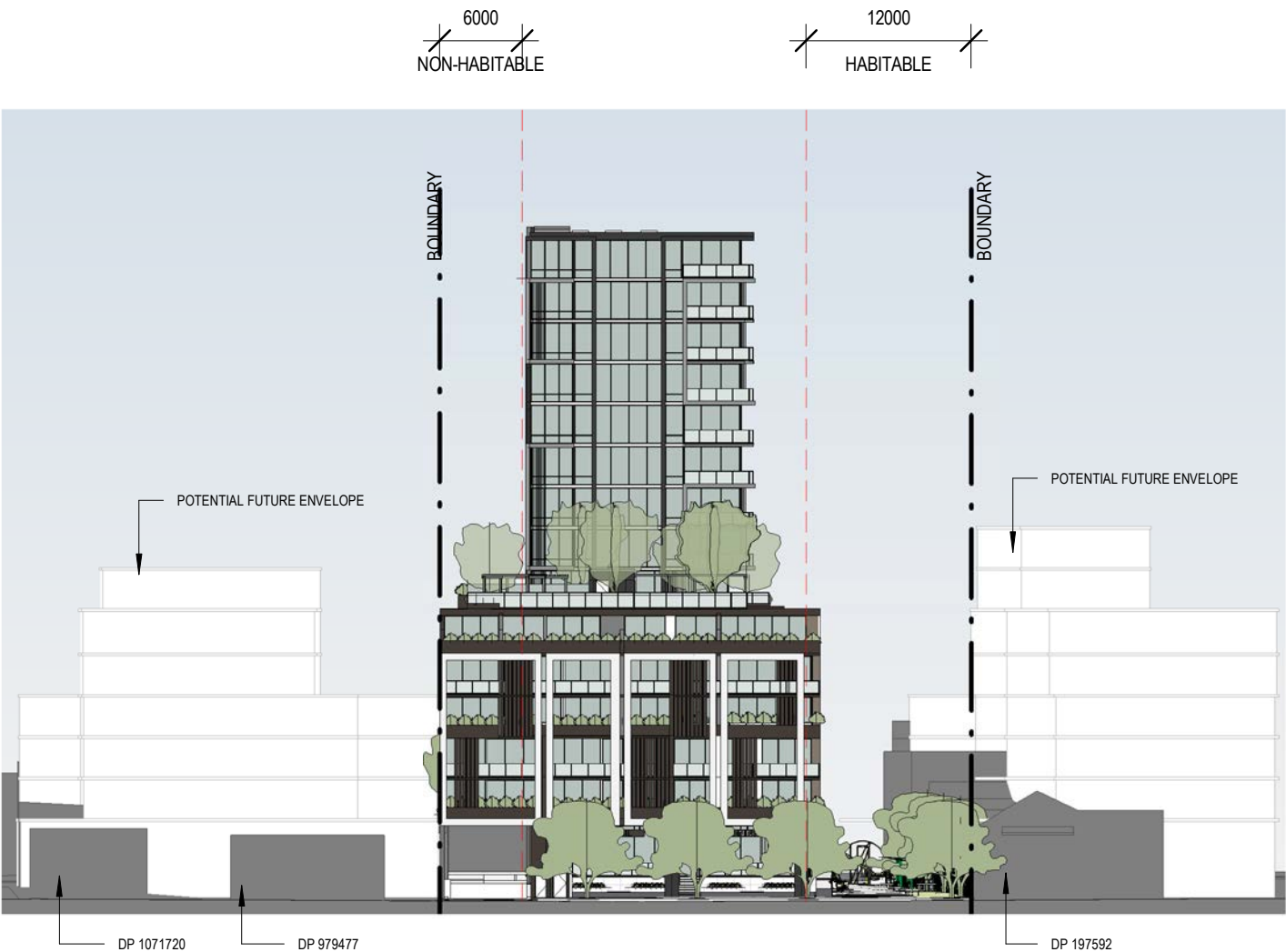


1|Laneway Design Intents

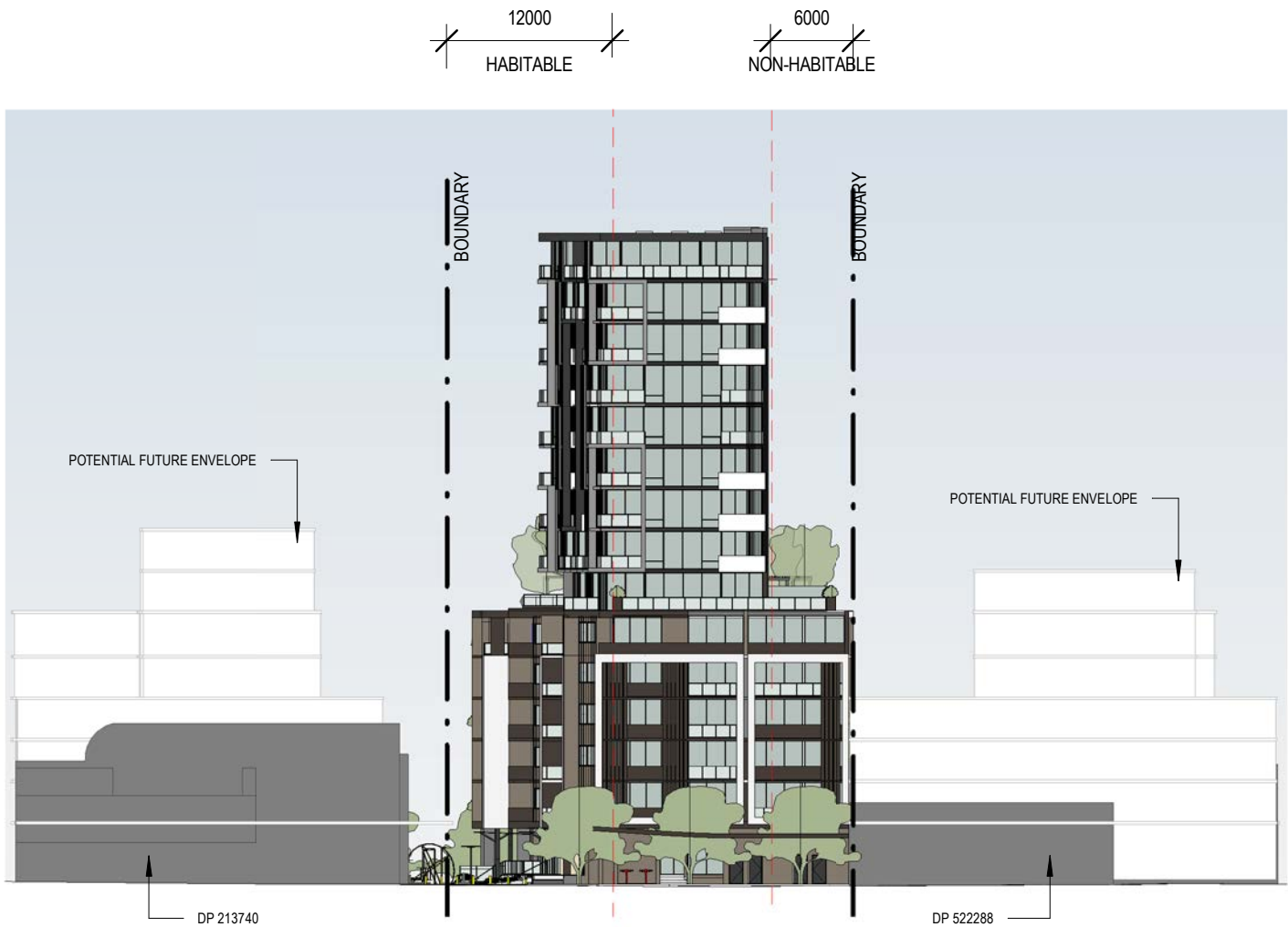
<div><div>brewster murray</div><div><div>3</div></div></div> <div>Architecture Interiors Urban Design Project Management ABN 63 804 200 206 99 York Street Sydney NSW 2000 Australia +612 9299 0988 brewstermurray.com.au</div>	Rev		Consultants	Client	Project	Drawing	North	Scale	Date	Project No.	Drawing No.
	Issue	Date	Description	F. R. DEVELOPMENT	Mixed Use Development 264-268 Keira St & 23 Kenny St, Wollongong	Laneway Diagrams 2		1 : 250 @ A3	2020	19-6059	A121 / C
	A	22.10.19	Issue for Coordination								
	B	08.01.19	Issue for DA RFI								
	C	25.03.20	DRP Revision								
Issued for DA											
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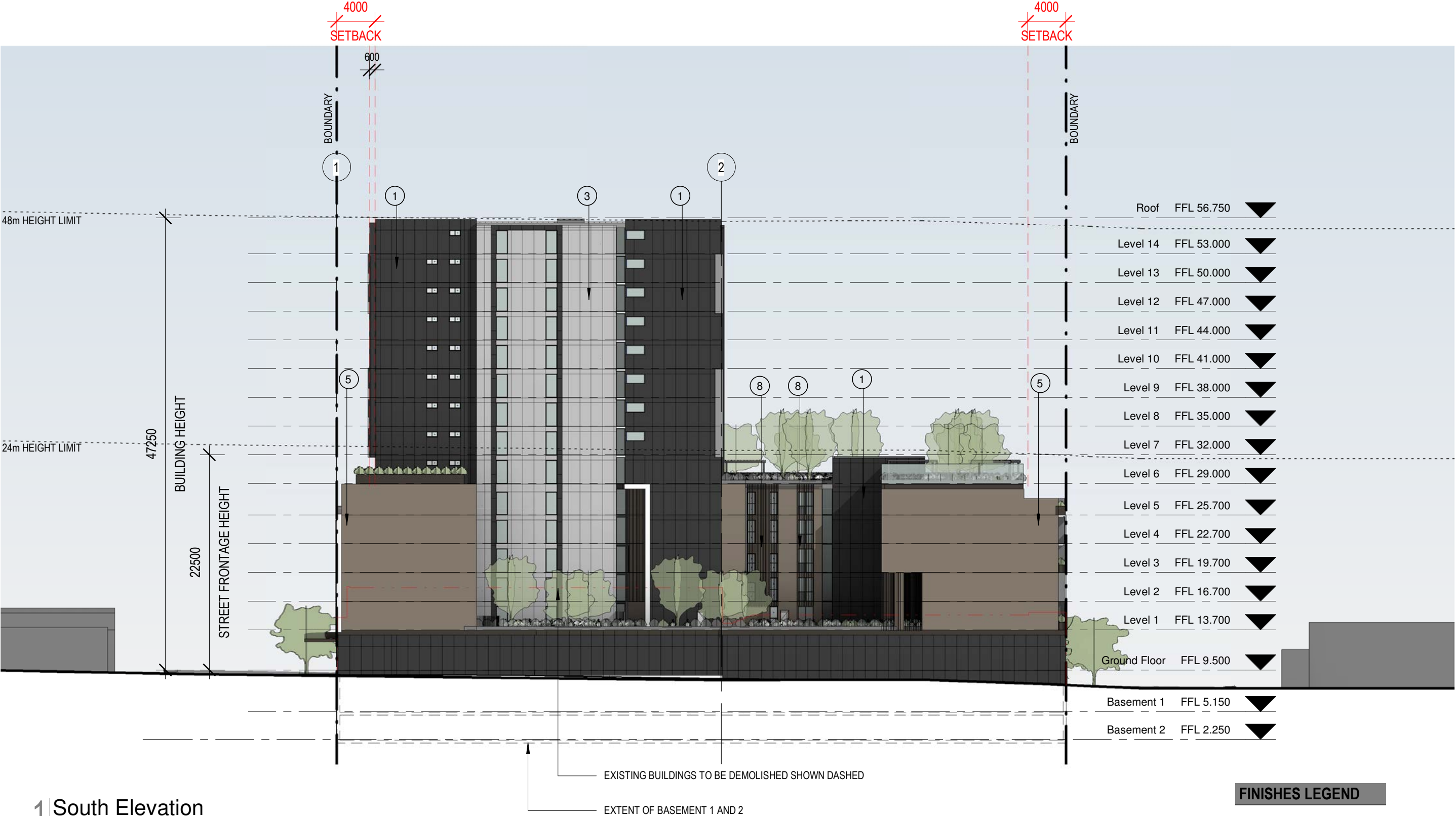


1 | Keira St Streetscape Elevation
1 : 500

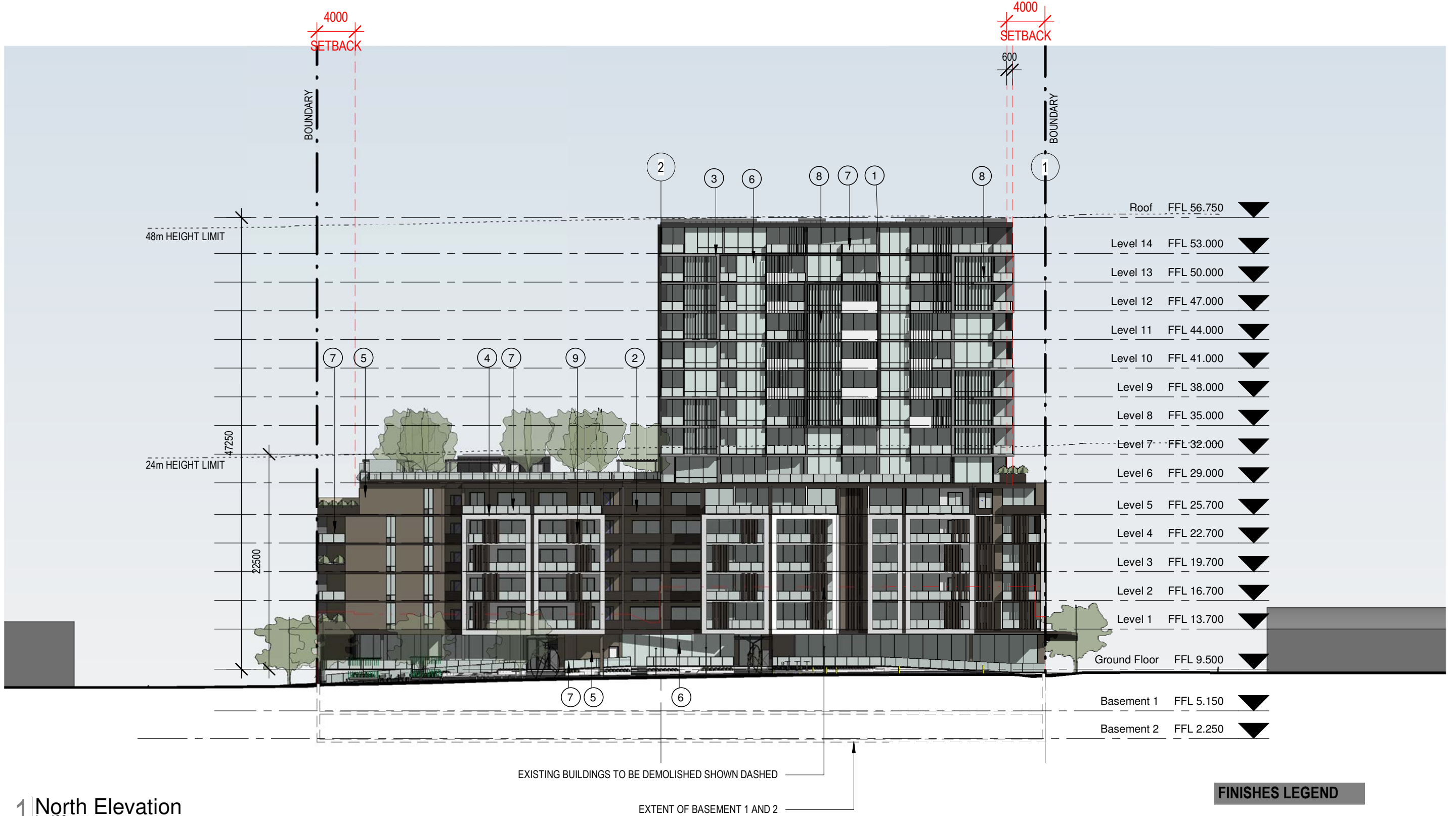


2 | Kenny St Streetscape Elevation
1 : 500

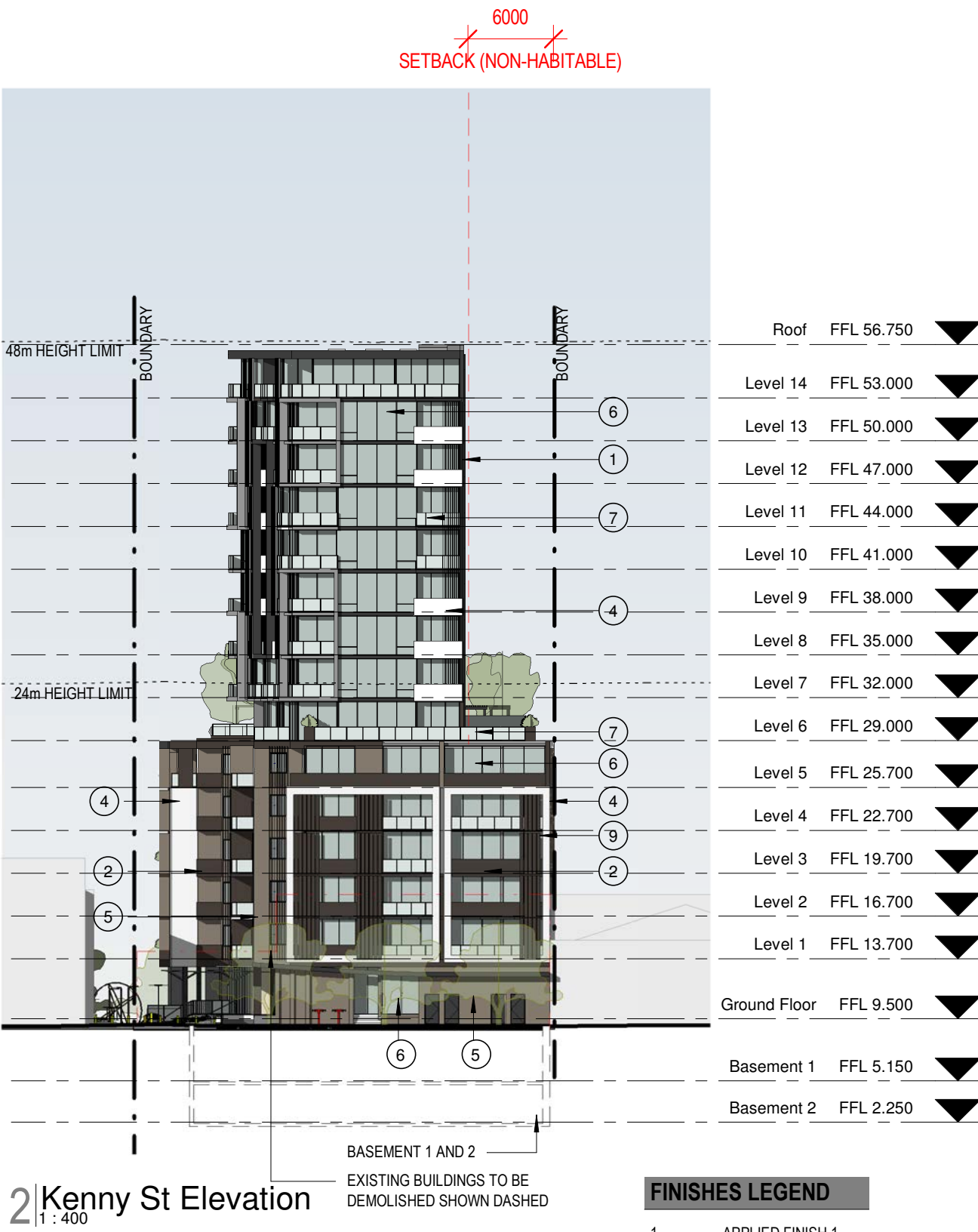
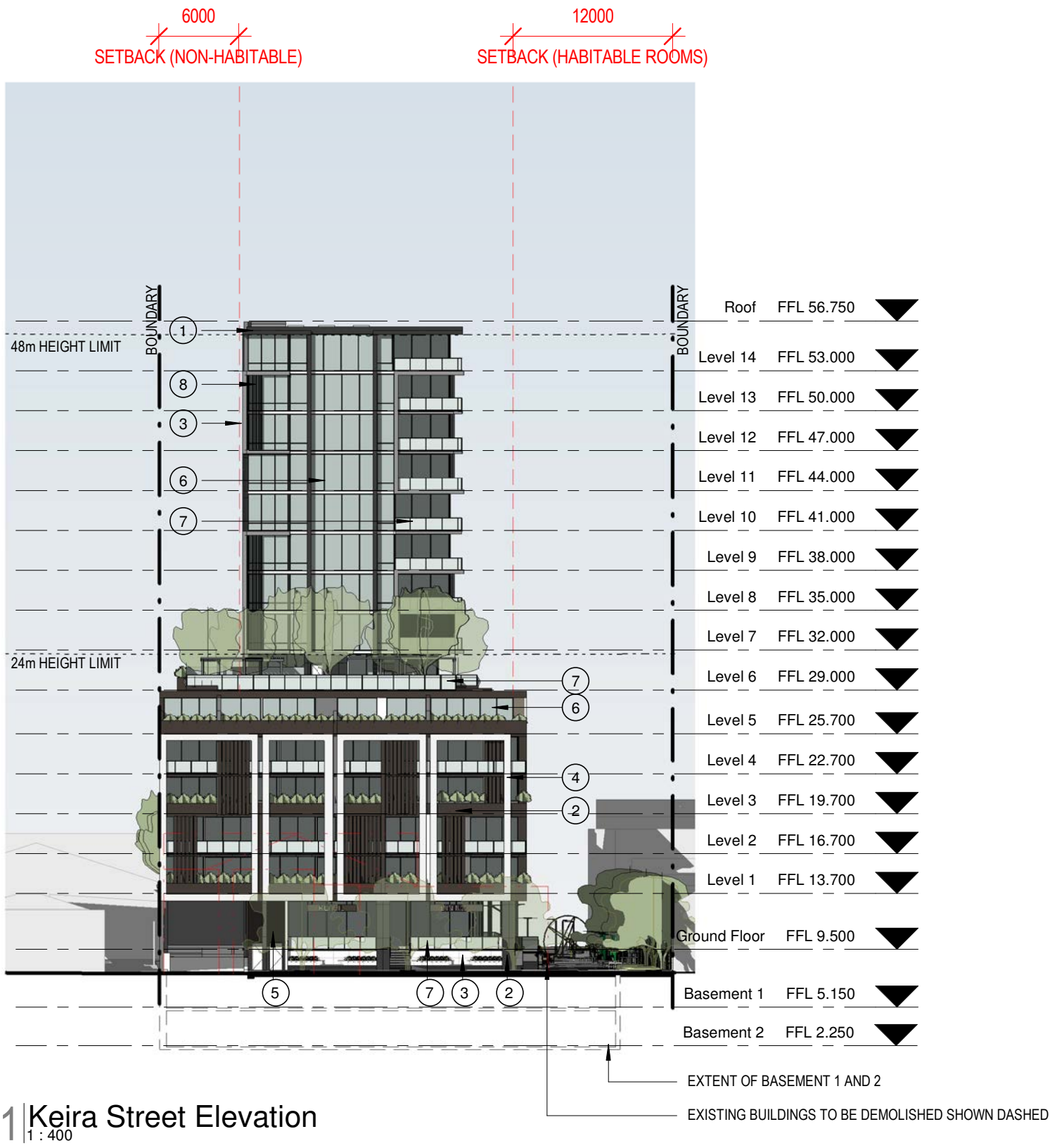
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FINISHES LEGEND

1. APPLIED FINISH 1
2. APPLIED FINISH 2
3. APPLIED FINISH 3
4. APPLIED FINISH 4
5. GLAZING - CLEAR
6. RAILING
7. SCREEN TYPE 1
8. SCREEN TYPE 2

2 | Ramp Section

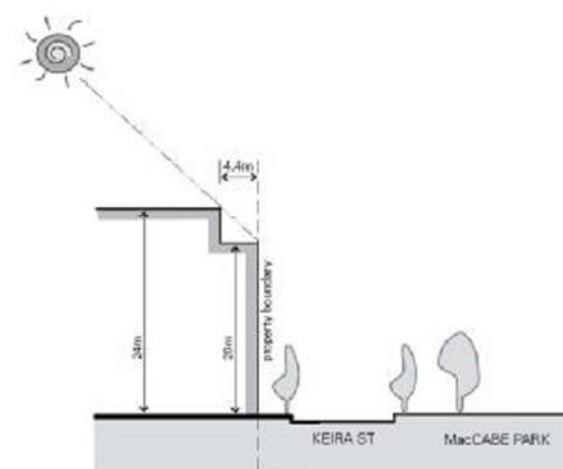
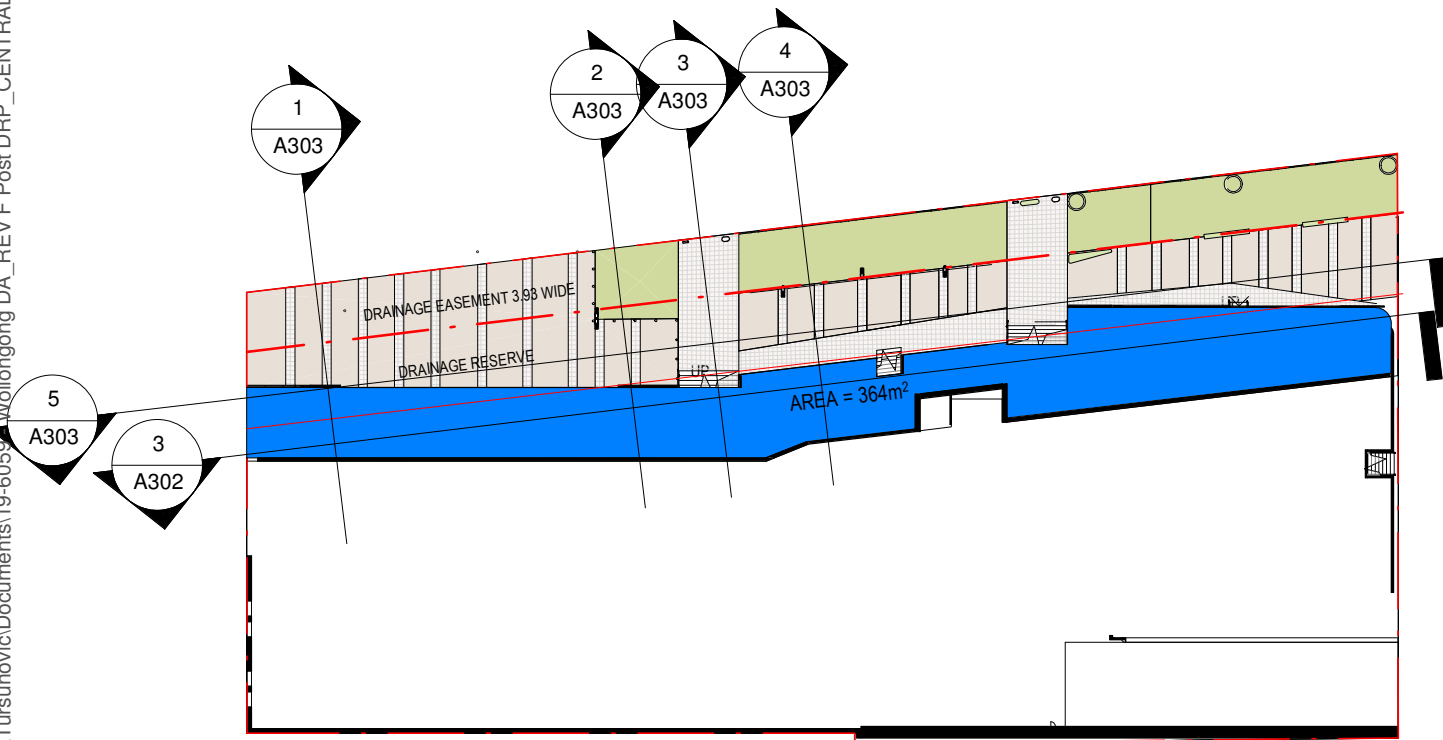


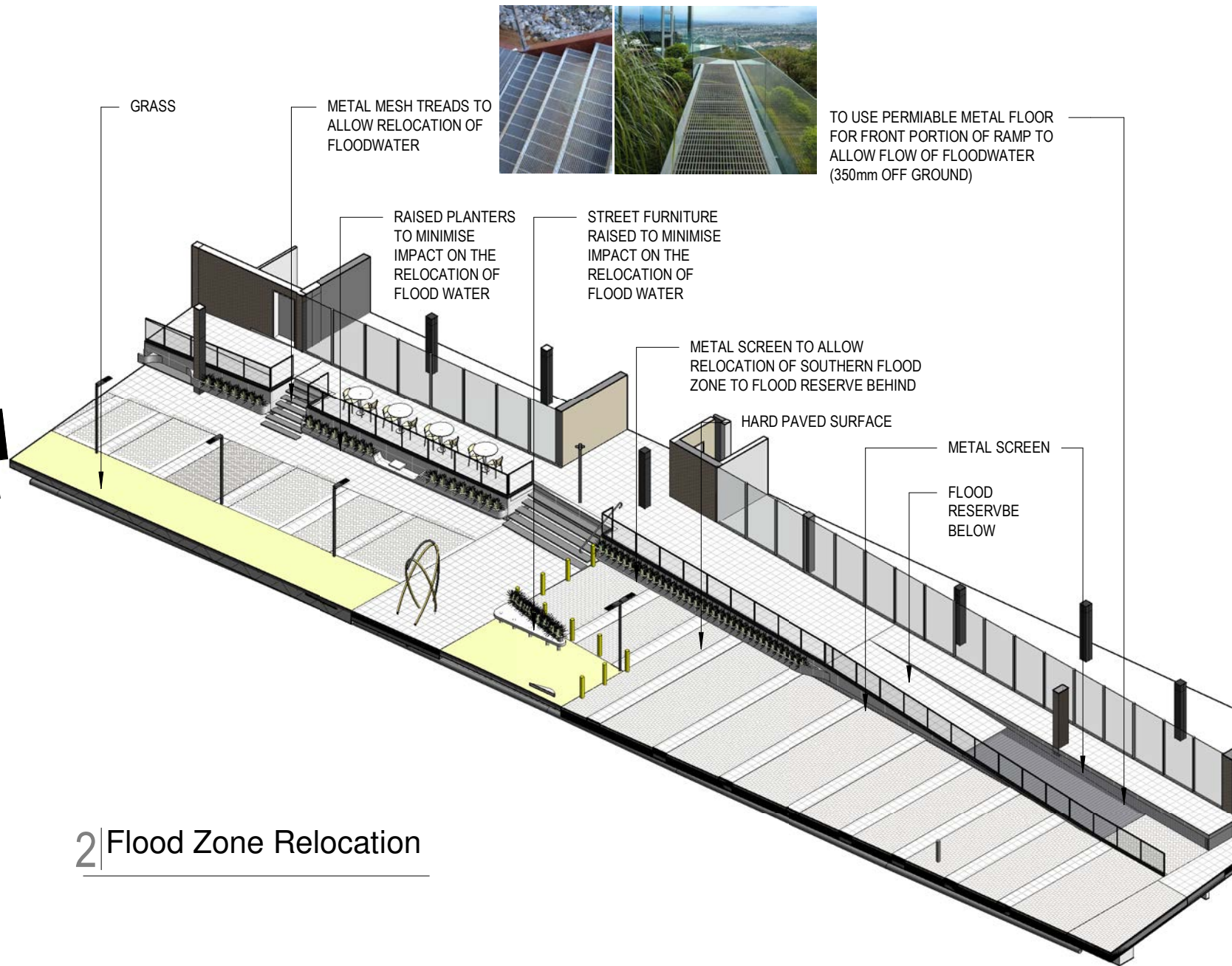
Figure 2.18 (bottom) Sun access diagram, height contours showing maximum building heights above ground

3 | Sun Plane Protection Diagram

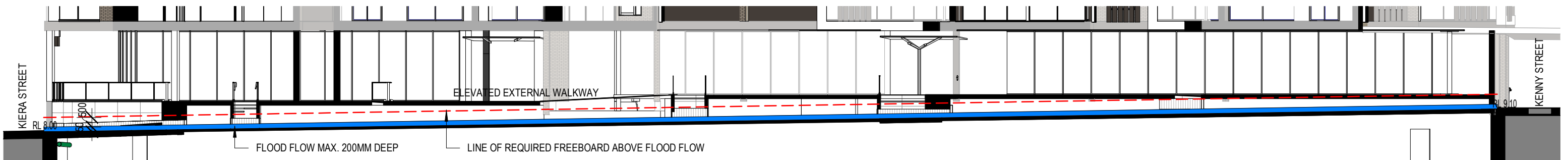
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1 Ground Floor - Relocation of Southern Flood Zone to Flood Reserve



2 Flood Zone Relocation



3 Overland Flood Flow Section
1 : 200



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Rev		
Issue	Date	Description
D	29.03.19	Preliminary Issue
E	24.04.19	DA Submission
F	19.07.19	DA Resubmission
G	25.19.19	Issue for Coordination
H	22.10.19	Issue for Coordination
I	08.011.19	Issue for DA RFI
J	25.03.20	DRP Revision

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Flood Zone Relocation

North

Scale
As indicated @
A3

Date

2020

Project No.

19-6059

Issued for

DA

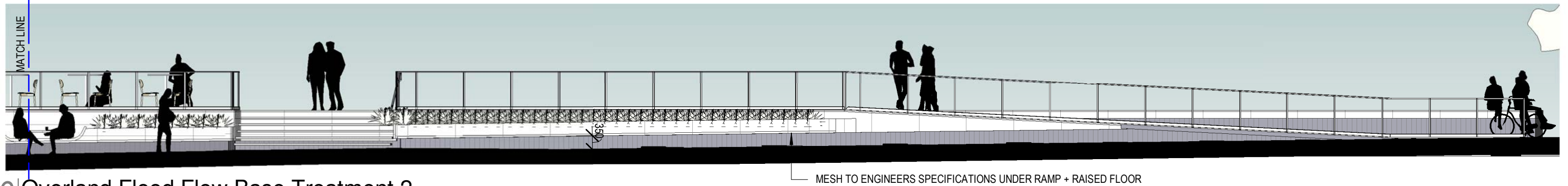
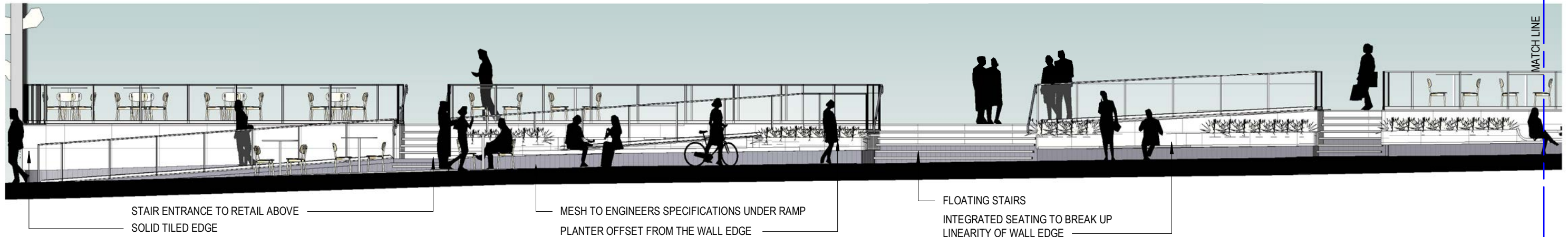
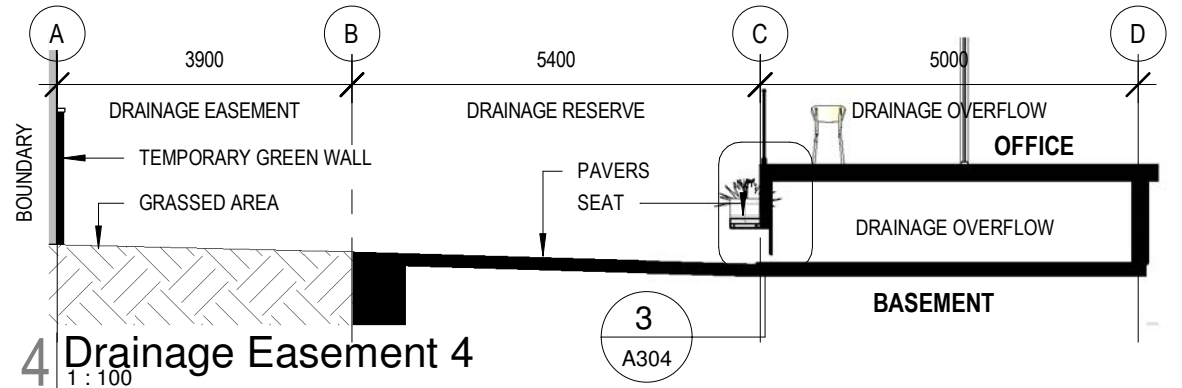
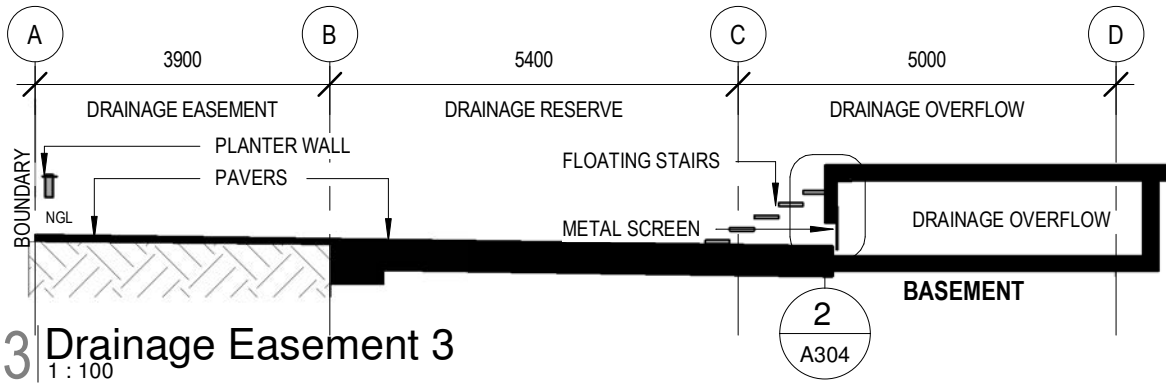
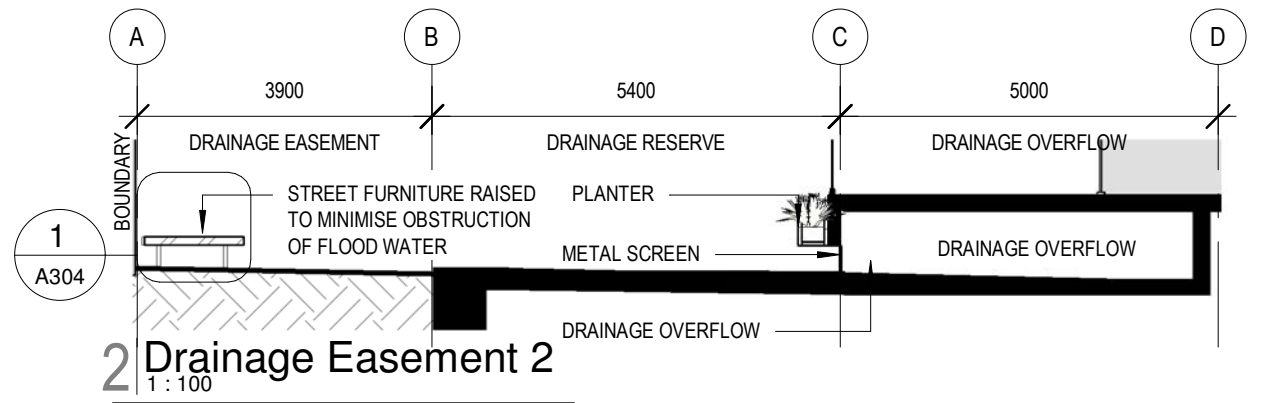
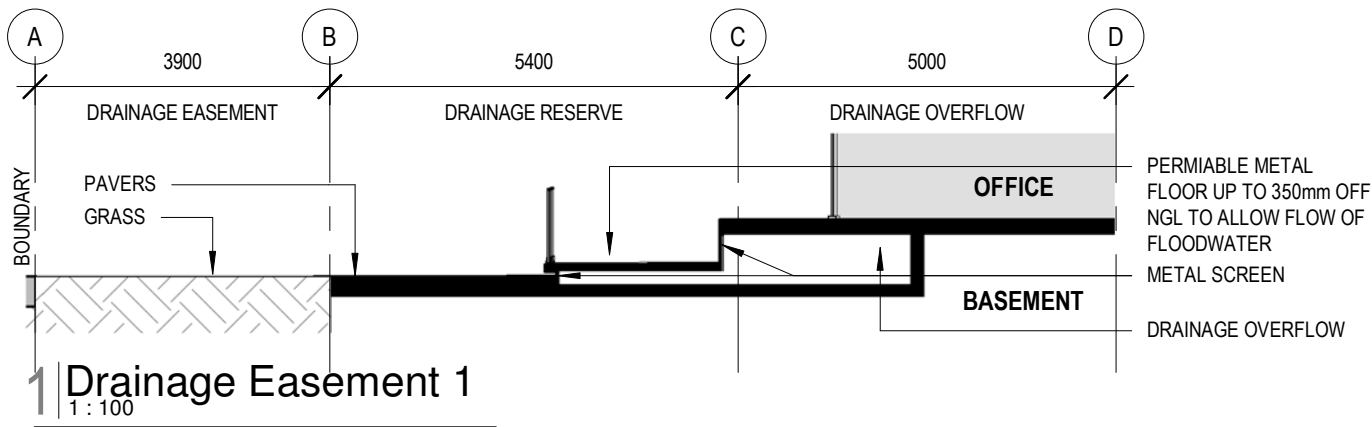
Drawing No.

A302 / J

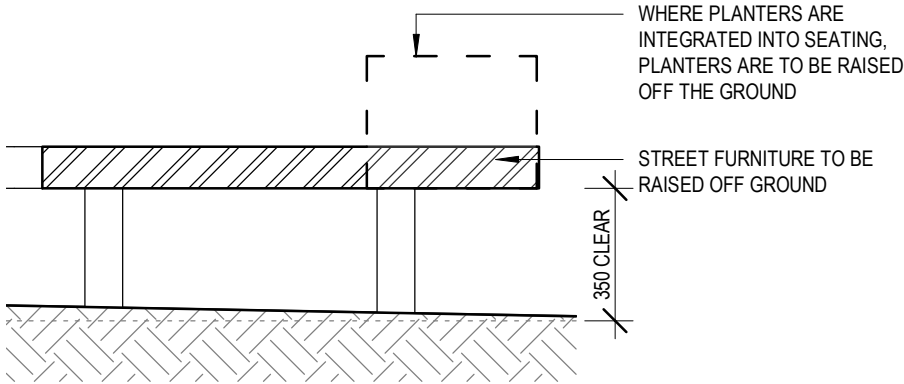
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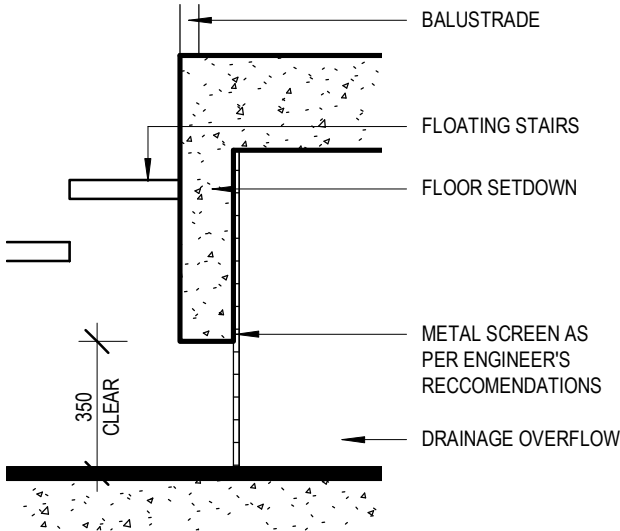
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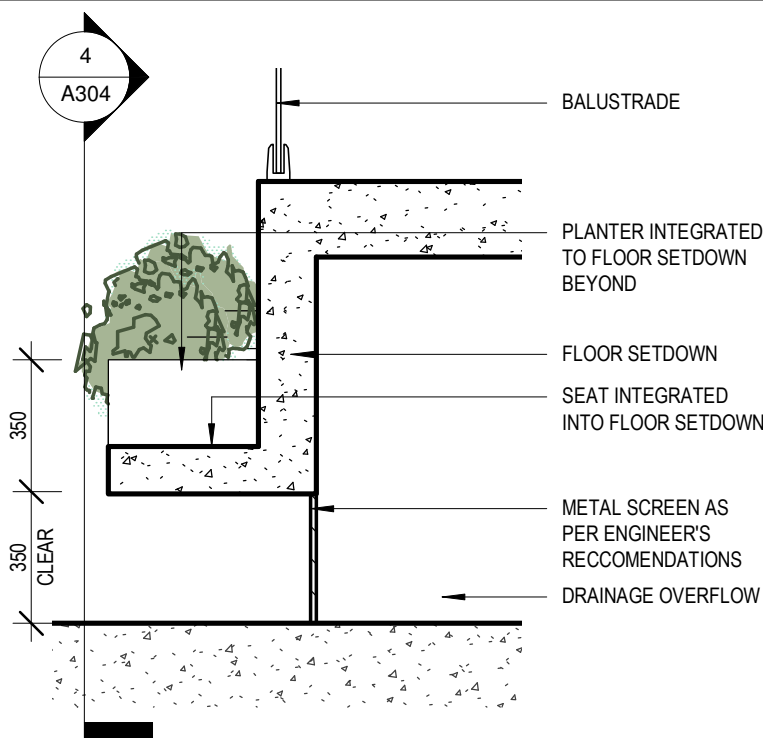
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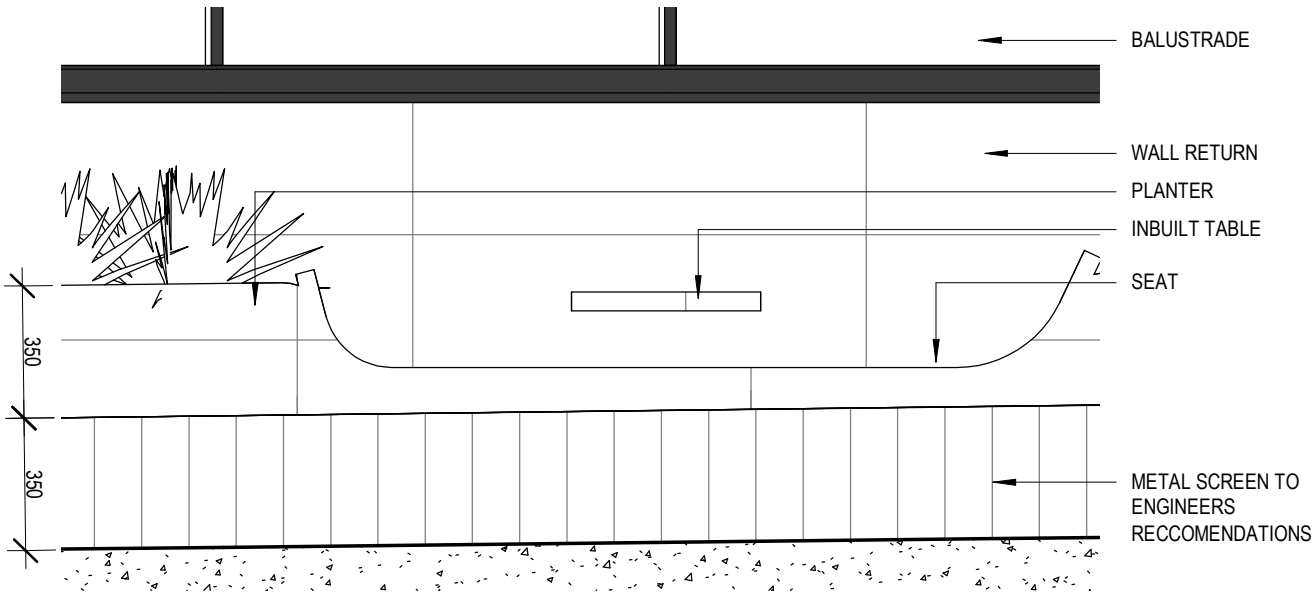
1 Furniture Detail
1 : 20



2 Wall Detail
1 : 20

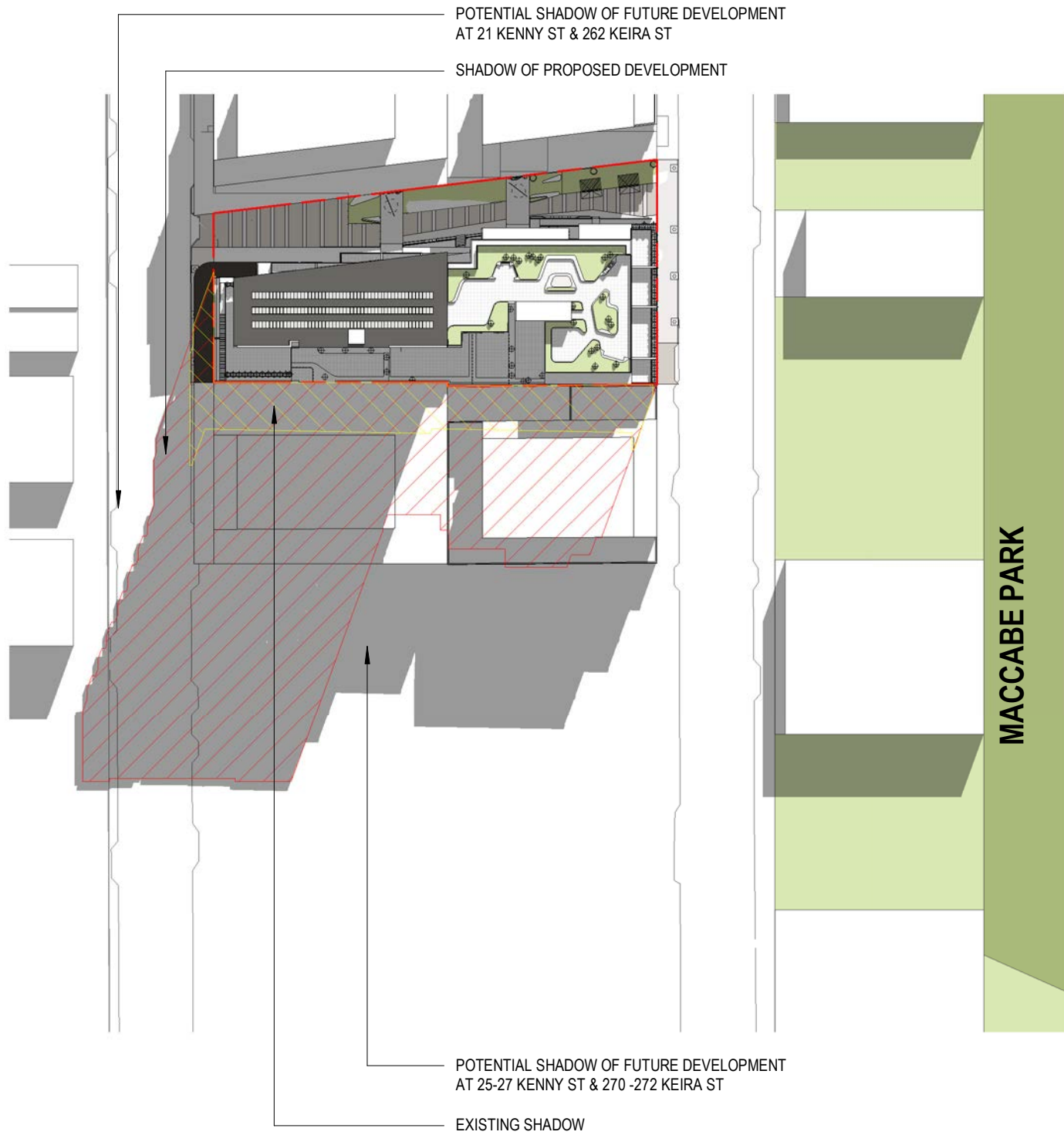


3 Wall Detail 2
1 : 20



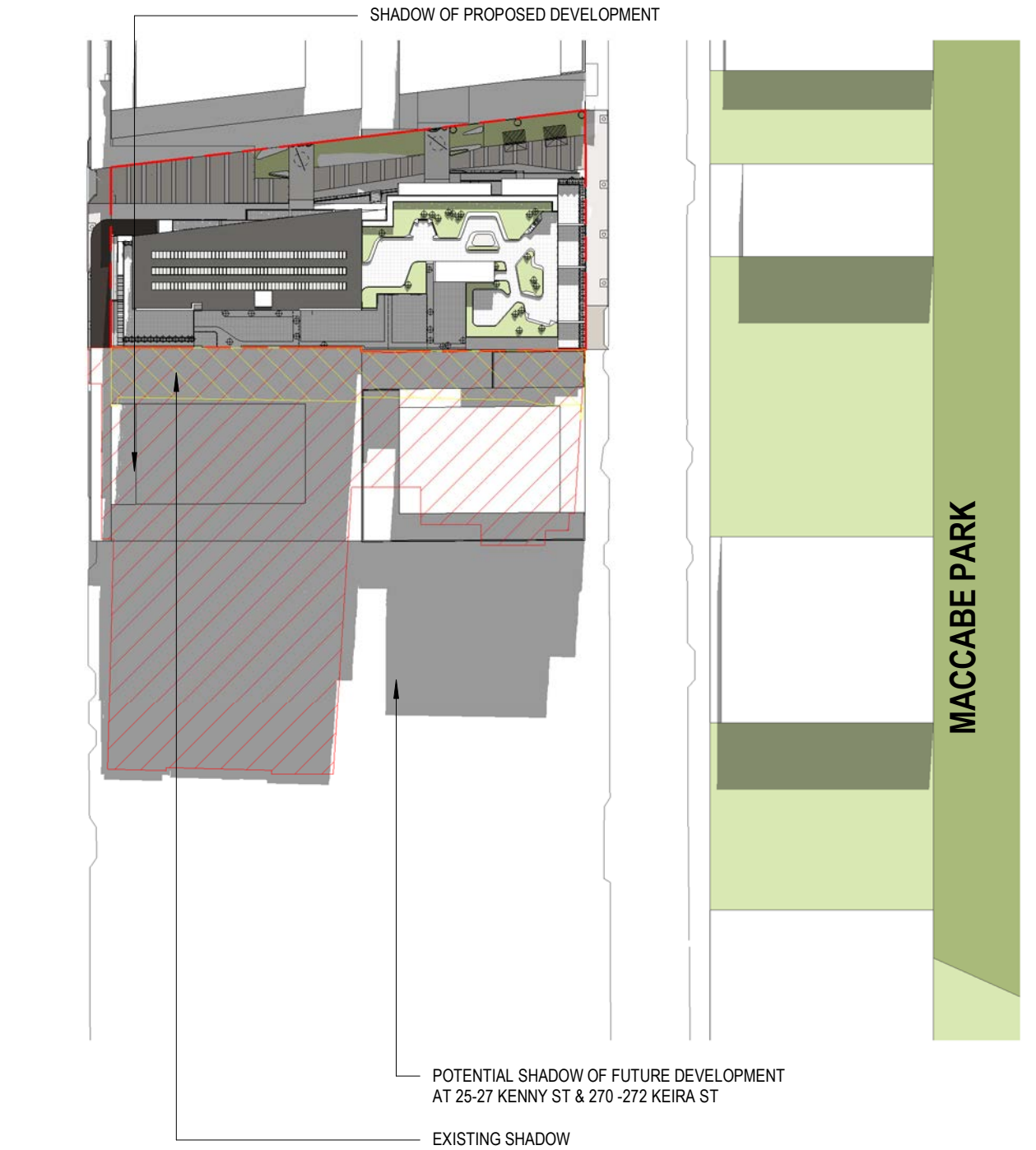
4 Metal Screen Detail
1 : 20

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1 | Shadow Impact 11am - 21 June
1 : 1000

NO IMPACT TO MACCABE PARK



2 | Shadow Impact 12pm - 21 June
1 : 1000

NO IMPACT TO MACCABE PARK

LEGEND

- Existing Solar Impact
- Proposed Solar Impact
- MacCabe Park
- Undeveloped land adjoining MacCabe Park

Rev	Consultants	
Issue	Date	Description
A	25.19.19	Issue for Coordination
B	22.10.19	Issue for Coordination
C	08.011.19	Issue for DA RFI
D	25.03.20	DRP Revision

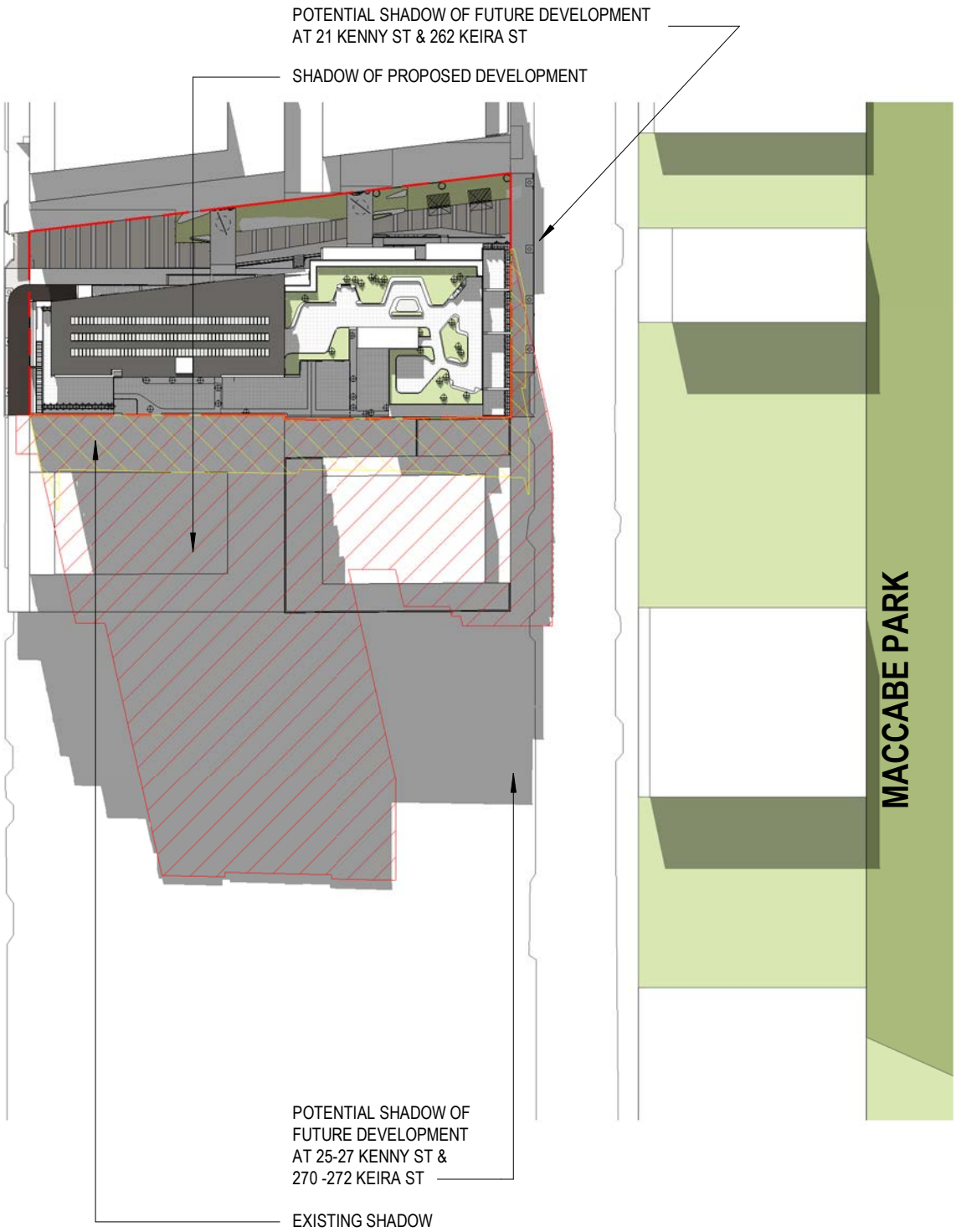
Client
F. R. DEVELOPMENT

Project
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing
Shadow Diagrams 2

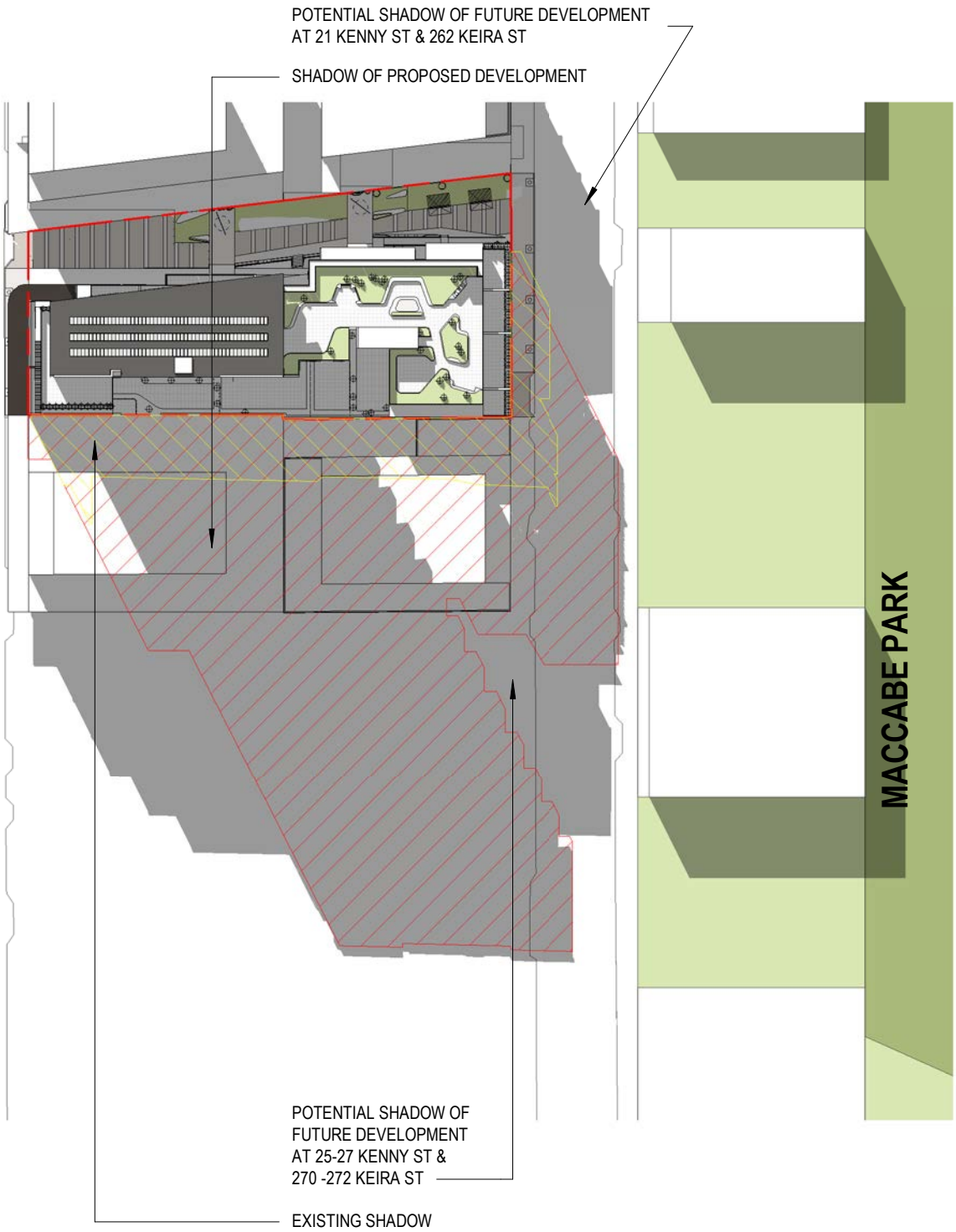
North	Scale	Date	Project No.	Drawing No.
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25/03/2020 3:02:02 PM



1 | Shadow Impact 1pm - 21 June
1 : 1000

NO IMPACT TO MACCABE PARK



2 | Shadow Impact 2pm - 21 June
1 : 1000

NO IMPACT TO MACCABE PARK

LEGEND

- Existing Solar Impact
- Proposed Solar Impact
- MacCabe Park
- Undeveloped land adjoining MacCabe Park

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A	25.19.19	Issue for Coordination	
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C	08.011.19	Issue for DA RFI	
D	25.03.20	DRP Revision	

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Shadow Diagrams 3

North



Scale

1 : 1000 @ A3
1:500 @ A1

Date

2020

Project No.

19-6059

Drawing No.

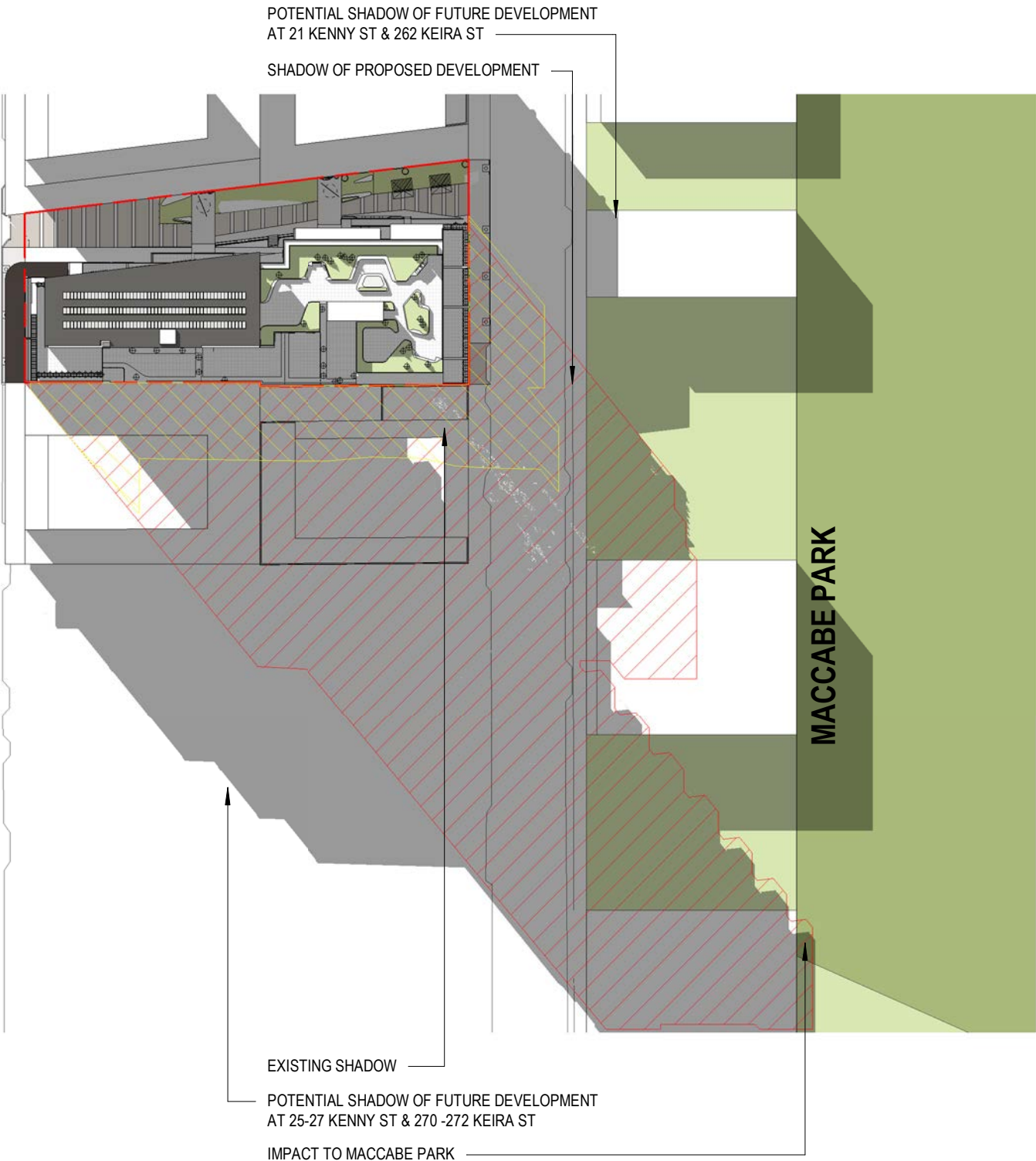
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1 | Shadow Impact 3pm - 21 June
1 : 1000

MINIMAL IMPACT TO MACCABE PARK
FOR ENVELOPE COMPLIANCE WITH FIGURE 2.18 OF WOLLONGONG DCP 2009 CHAPTER 13 REFER TO DRAWING 3 SUN PLANE PROTECTION DIAGRAM ON SHEET A301

LEGEND

- Existing Solar Impact
- Proposed Solar Impact
- MacCabe Park
- Undeveloped land adjoining MacCabe Park

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Issue	Date	Description
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C	08.011.19	Issue for DA RFI
D	25.03.20	DRP Revision

Consultants

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Project

Mixed Use Development
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Kenny St, Wollongong

Drawing

Shadow Diagrams 4

North



Scale

1 : 1000 @ A3
1:500 @ A1

Date

2020

Project No.

19-6059

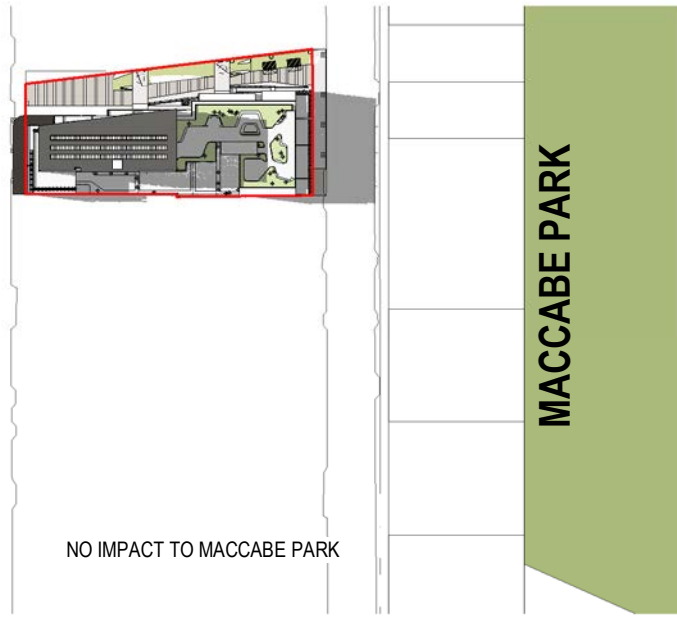
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A404 / D

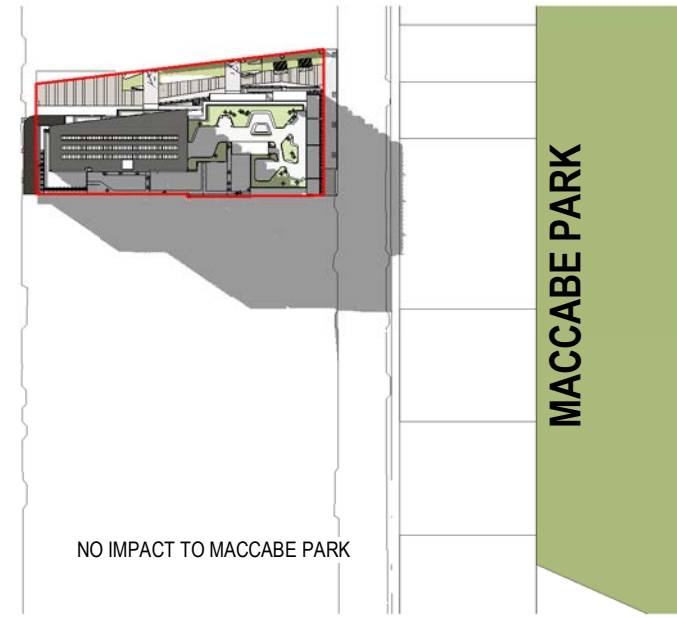
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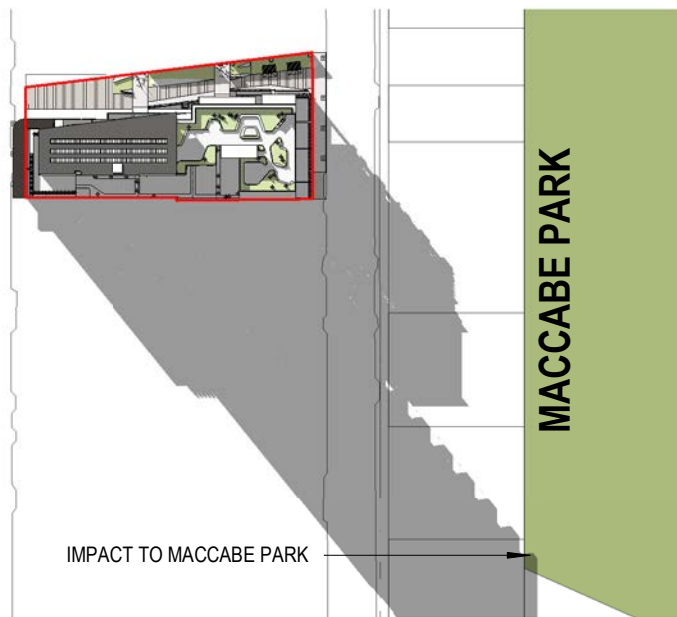
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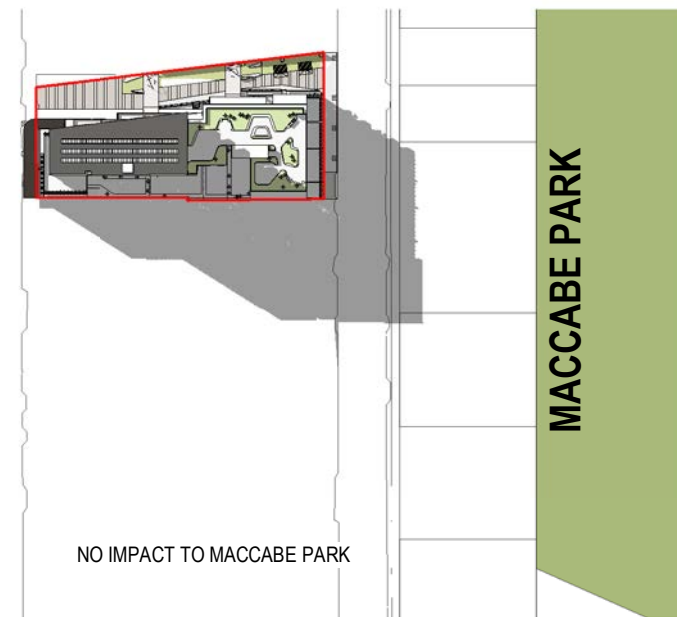
1 Shadow Impact 3pm - Summer Solstice
1 : 2000



2 Shadow Impact 3pm - Autumn Solstice
1 : 2000

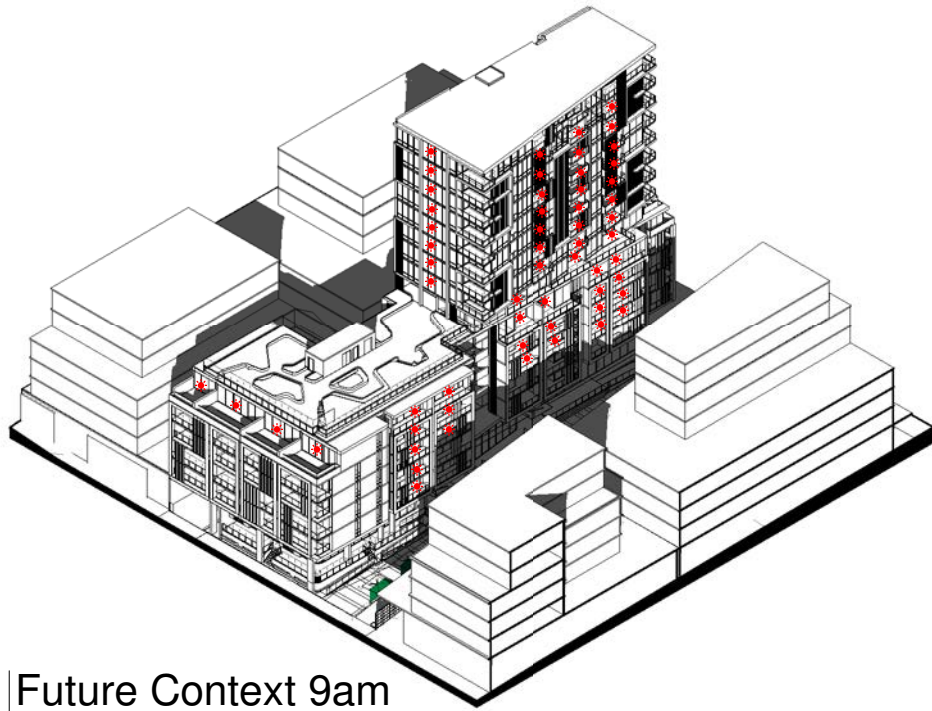


3 Shadow Impact 3pm - Winter Solstice
1 : 2000

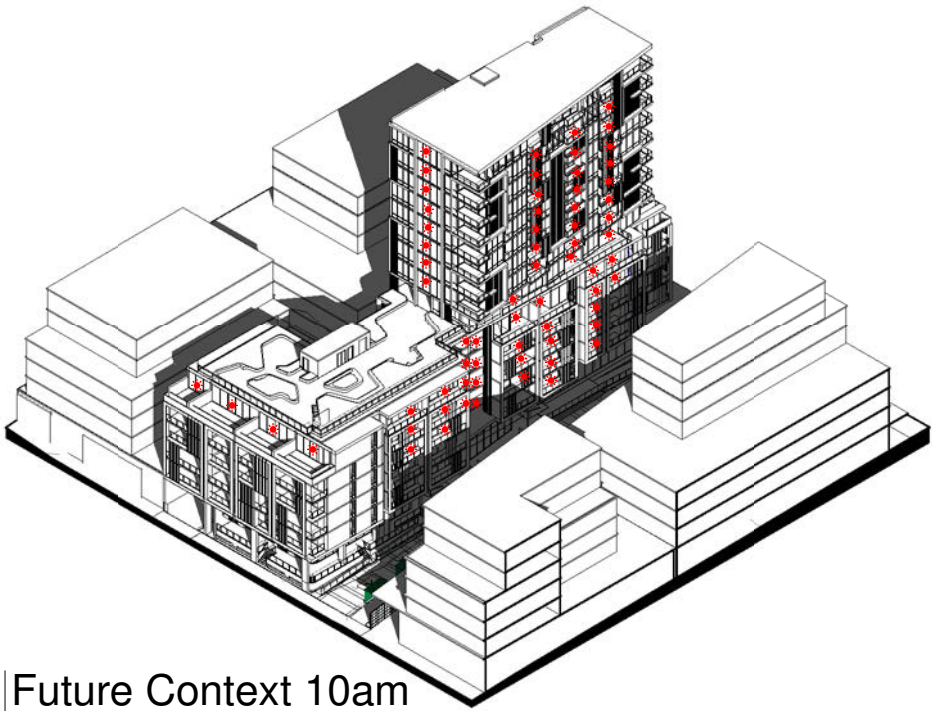


4 Shadow Impact 3pm - Spring Solstice
1 : 2000

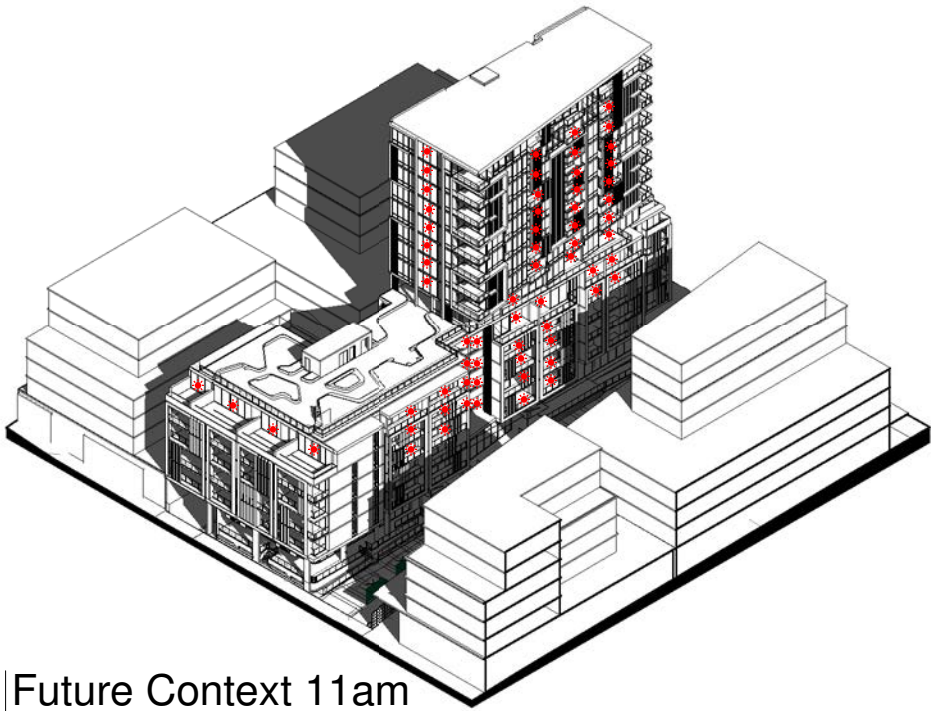
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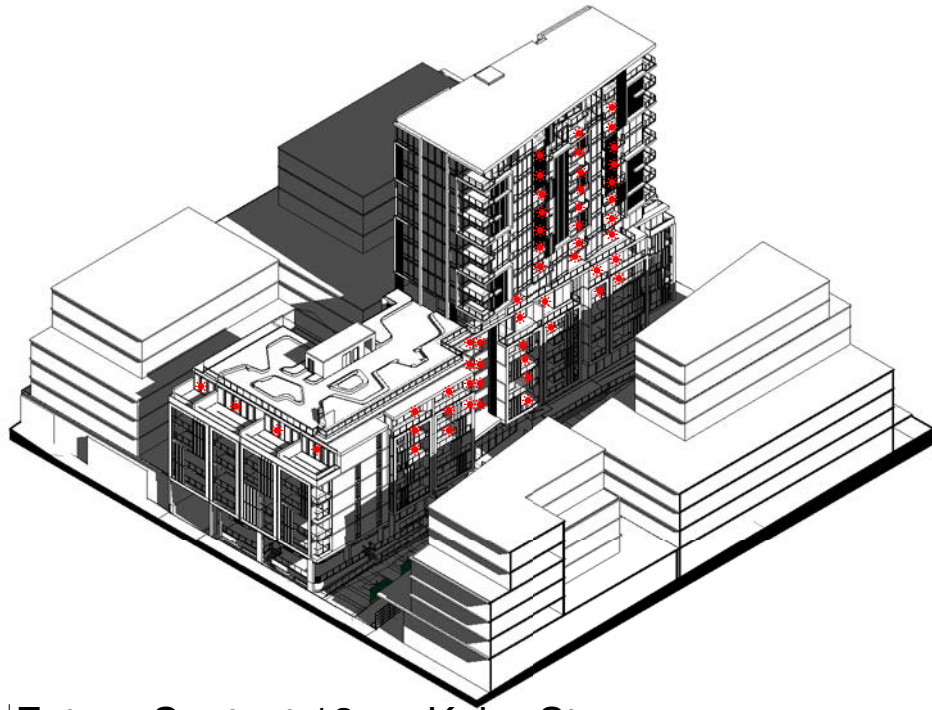
1|Future Context 9am



2|Future Context 10am

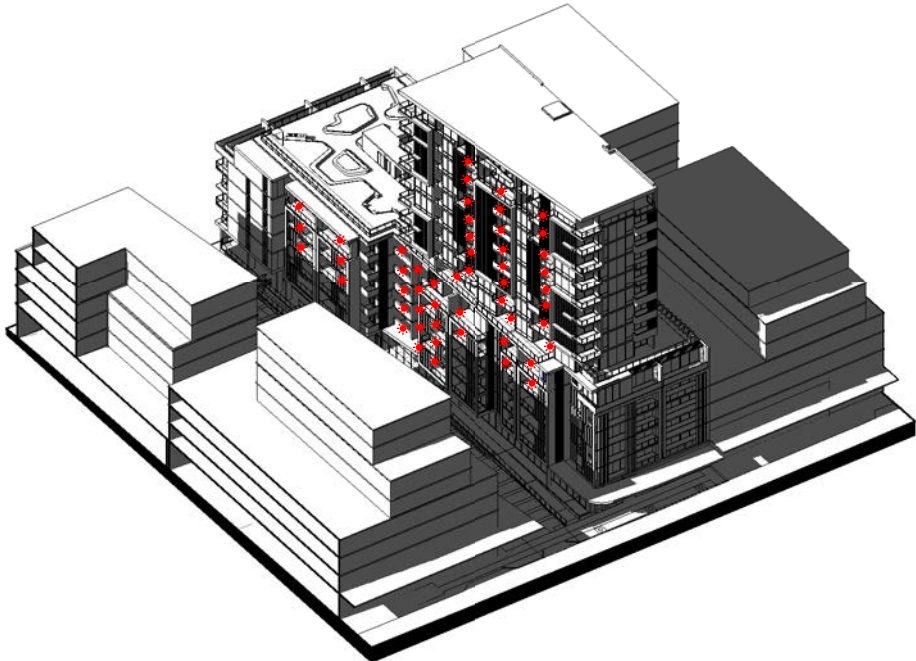


3|Future Context 11am

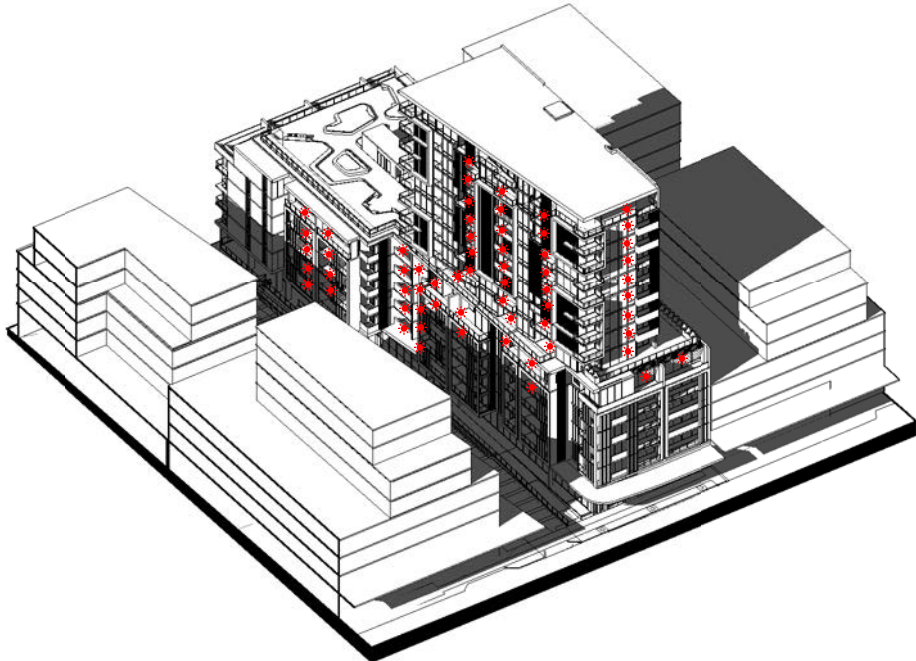


4|Future Context 12pm Keira St

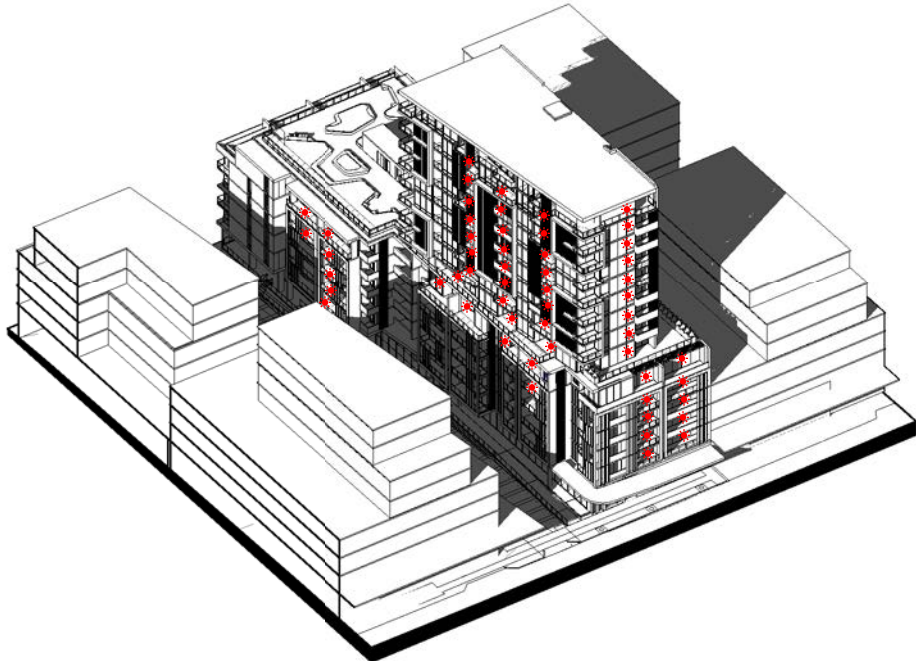
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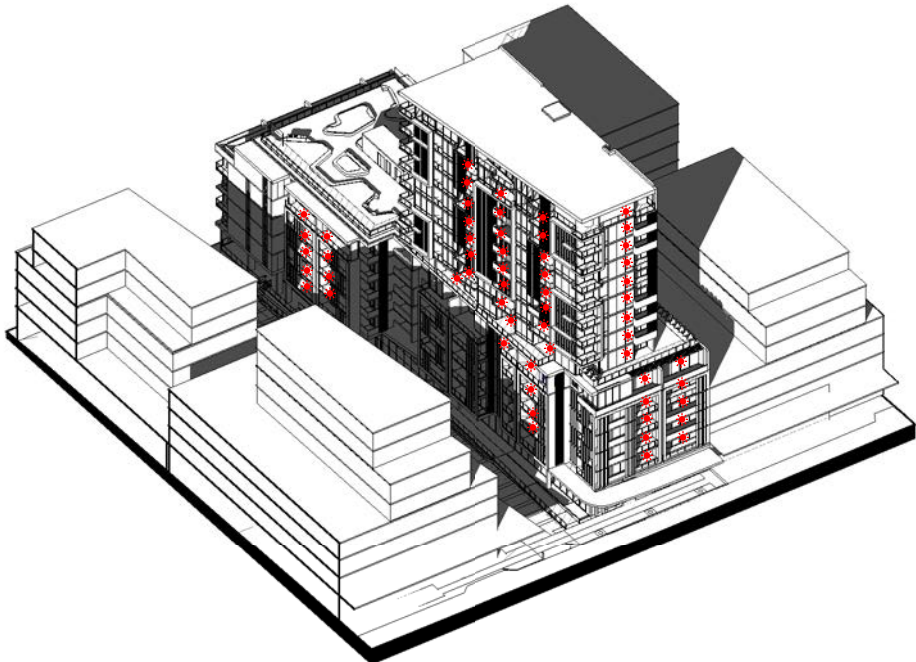
1|Future Context 12pm Kenny St



2|Future Context 1pm



3|Future Context 2pm

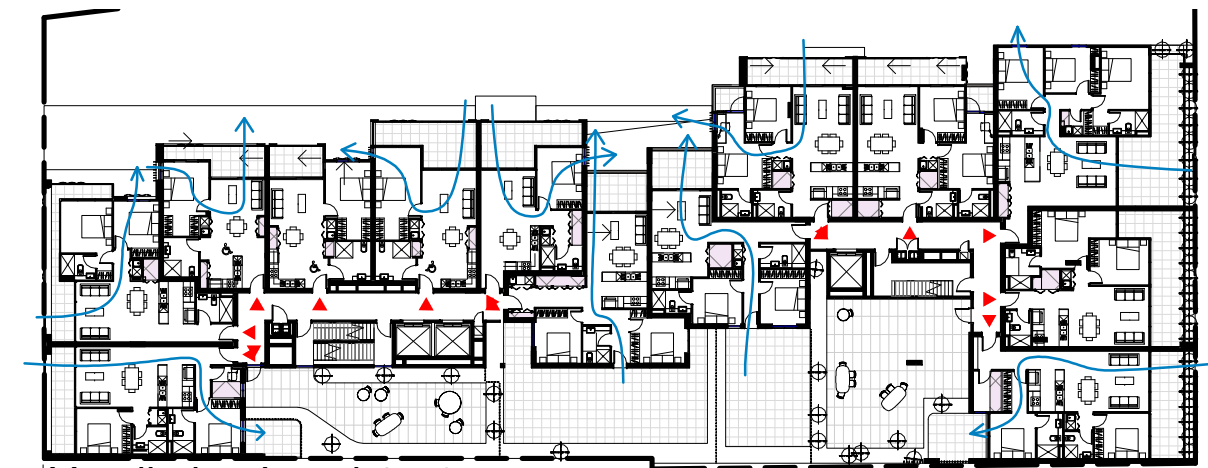


4|Future Context 3pm

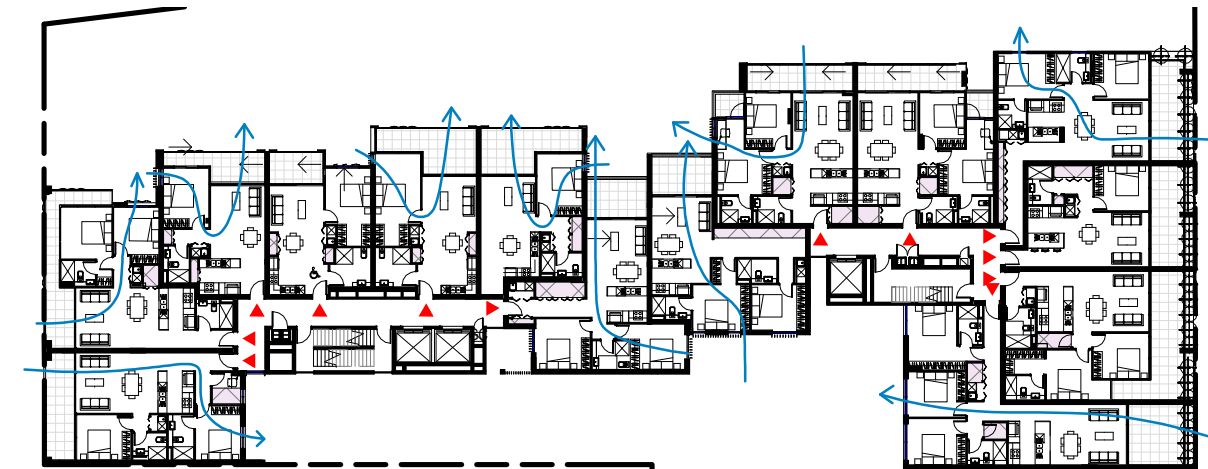
SOLAR ACCESS IN FUTURE CONTEXT SUMMARY

LEVEL	MIN. 2HR SUNLIGHT	TOTAL # UNITS
14	ALL UNITS	2
07 - 13	ALL UNITS	35
06	ALL UNITS	4
05	ALL UNITS	14
04	UNIT 403 _(11AM-1PM) , 404 _(11AM-1PM) , 405 _(11AM-1PM) , 406 _(11AM-1PM) , 408 _(11AM-1PM) , 409 _(9AM-11AM) , 410 _(9AM-11AM)	7
03	UNIT 306 _(11AM-1PM) , 307 _(11AM-1PM) , 308 _(11AM-1PM) , 309 _(9AM-11AM) , 310 _(9AM-11AM)	5
02	UNIT 206 _(10AM-12PM) , 207 _(11AM-1PM) , 208 _(11AM-1PM) , 210 _(9AM-11AM)	4
01	UNIT 107 & 108 _(11AM - 1PM)	2
TOTAL		73 = 67%

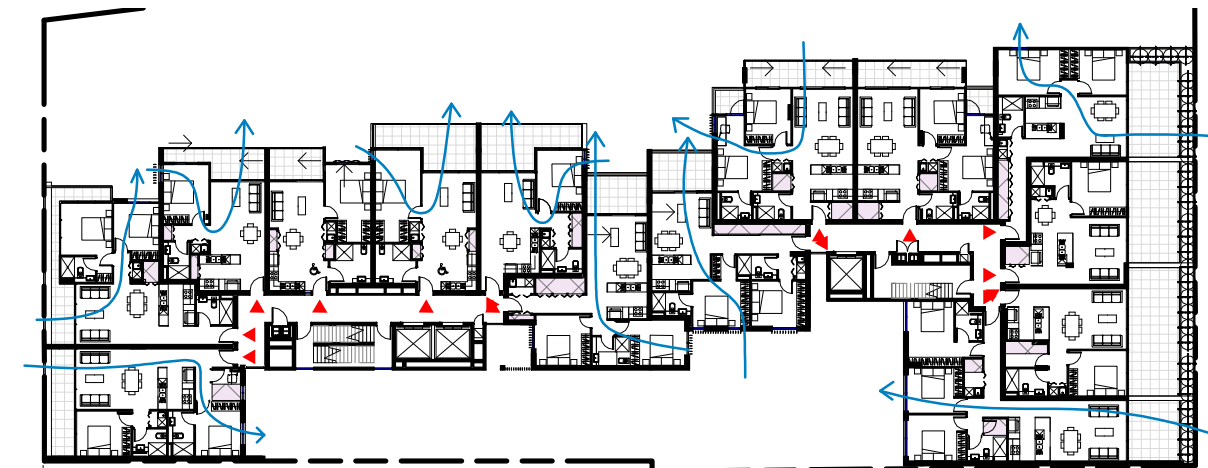
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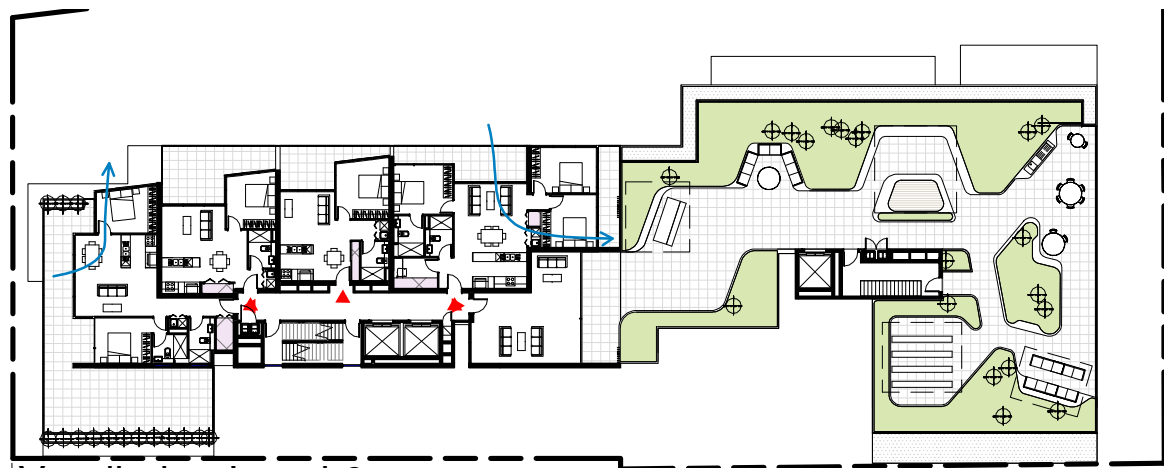
1 Ventilation Level 1 - 2
10 / 13 units = 20 / 26 units across 2 levels



2 Ventilation Level 3 - 4
10 / 14 units = 20 / 28 units across 2 levels



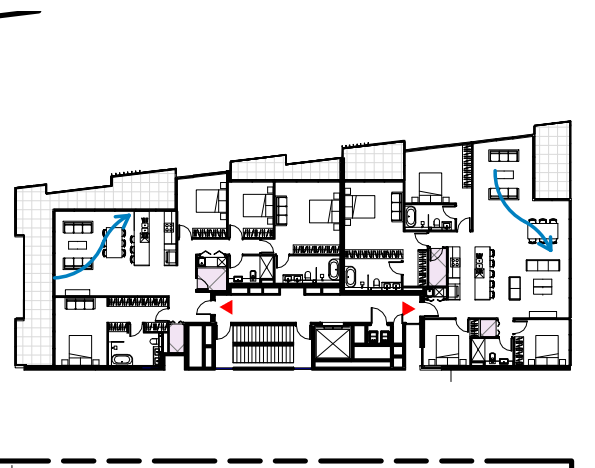
6 Ventilation Level 5
10 / 14 units



3 Ventilation Level 6
2 / 4 units



4 Ventilation Level 7-13
2 / 5 units = 14 / 35 units across 7 levels

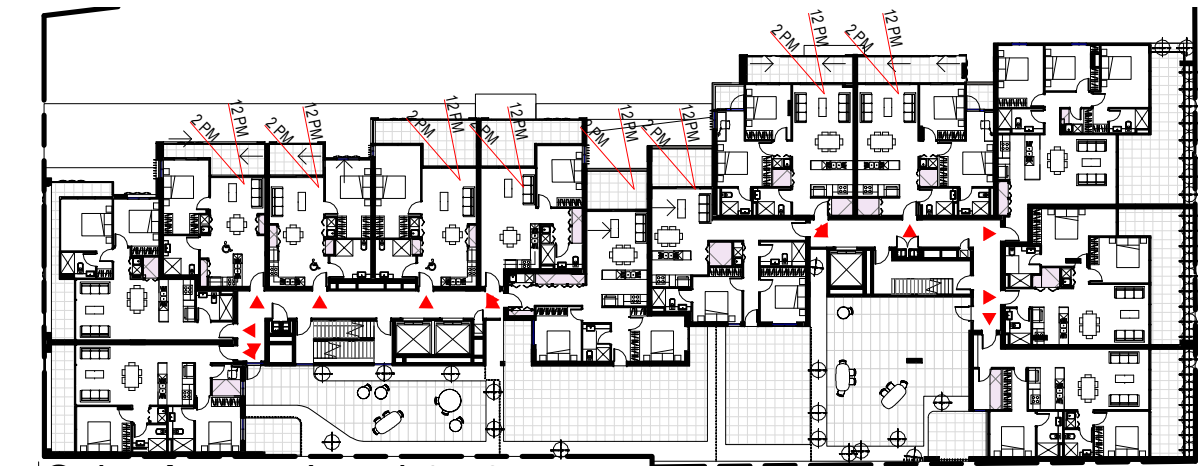


5 Ventilation Level 14
2 / 2 units

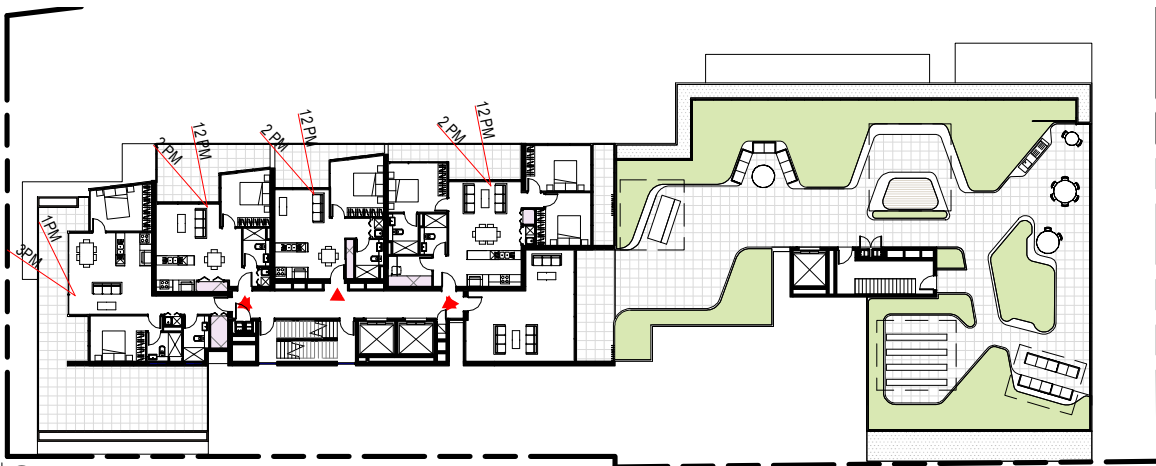
CROSS VENTILATION

Min. Requirement	Compliance
60% of units to be cross ventilated (65.4 units)	complies 62% - 68 units
cross depth of apartment under 18m	complies

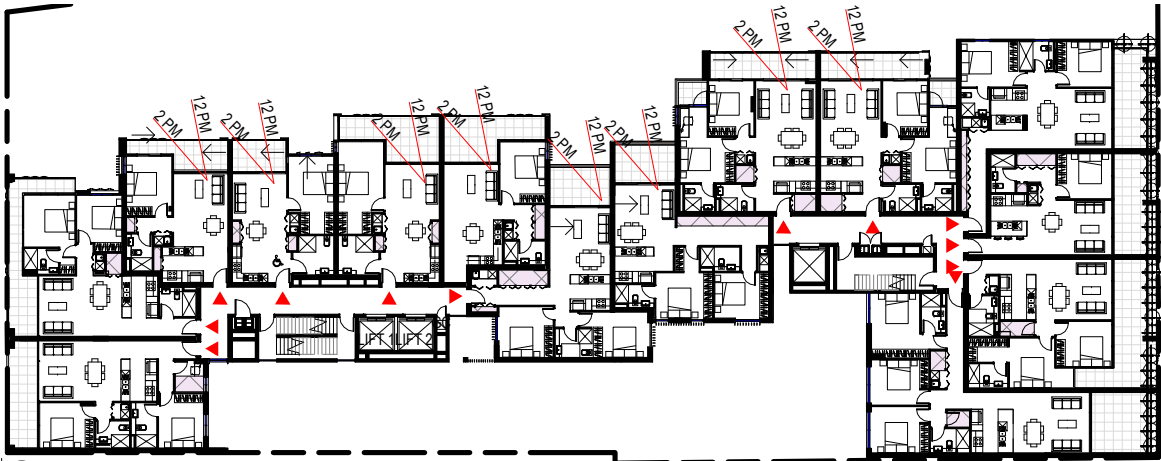
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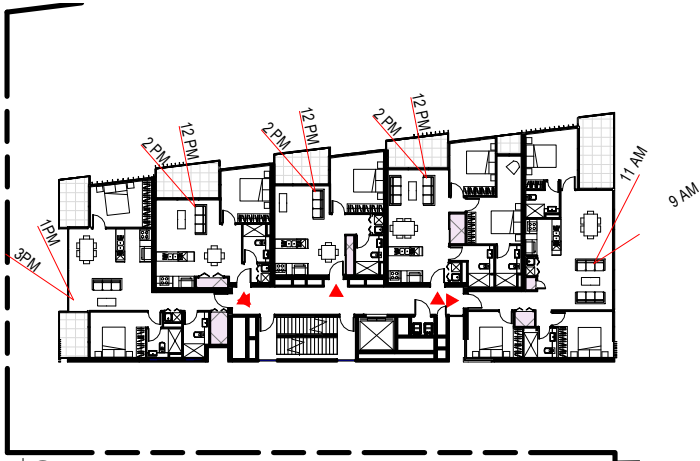
1 Solar Access Level 1 - 2
8 / 13 units = 16 / 26 units across 2 levels



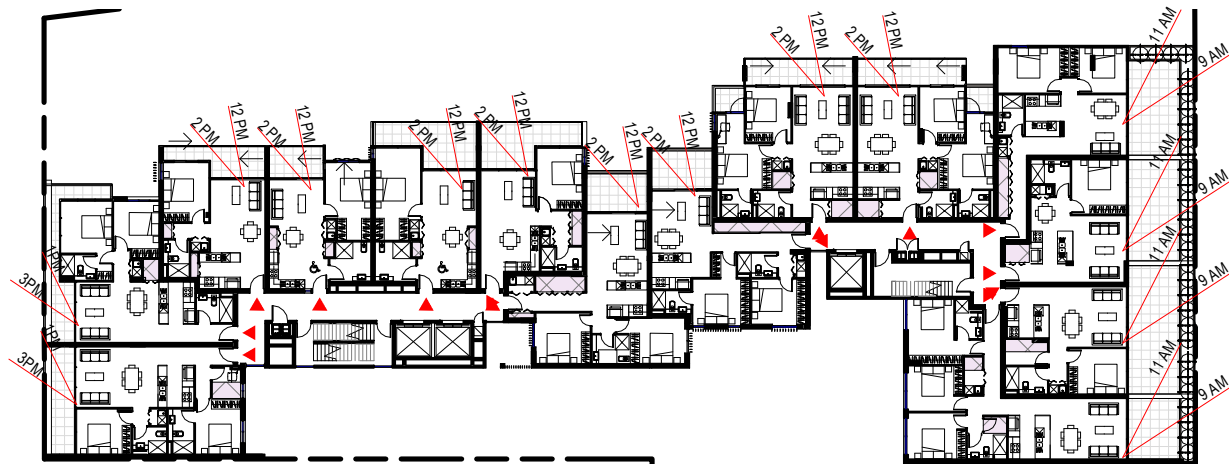
4 Solar Access Level 6
4 / 4 units



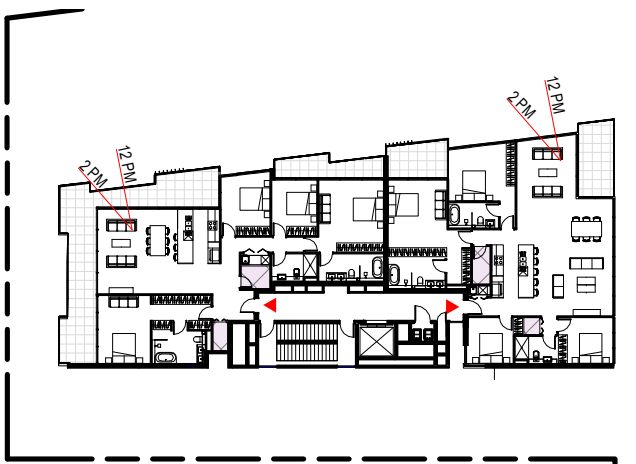
2 Solar Access Level 3 - 4
8 / 14 units = 16 / 28 units across 2 levels



5 Solar Access Level 7 - 13
5 / 5 units = 35 / 35 units across 7 levels



3 Solar Access Level 5
14 / 14 units

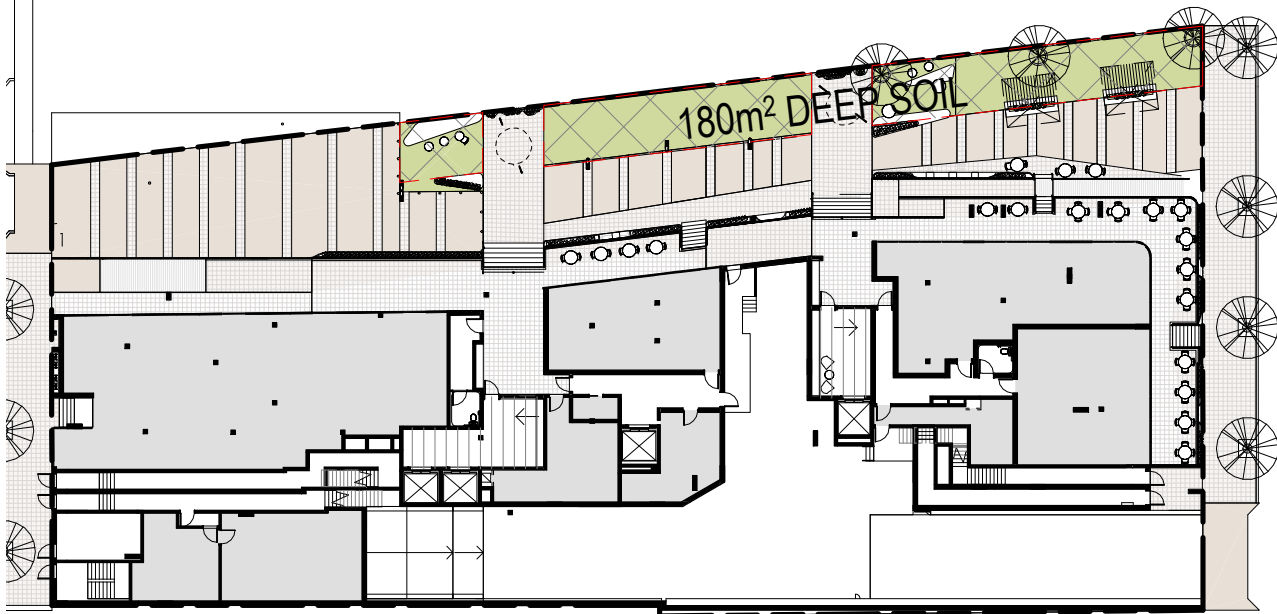


6 Solar Access Level 14
2 / 2 units

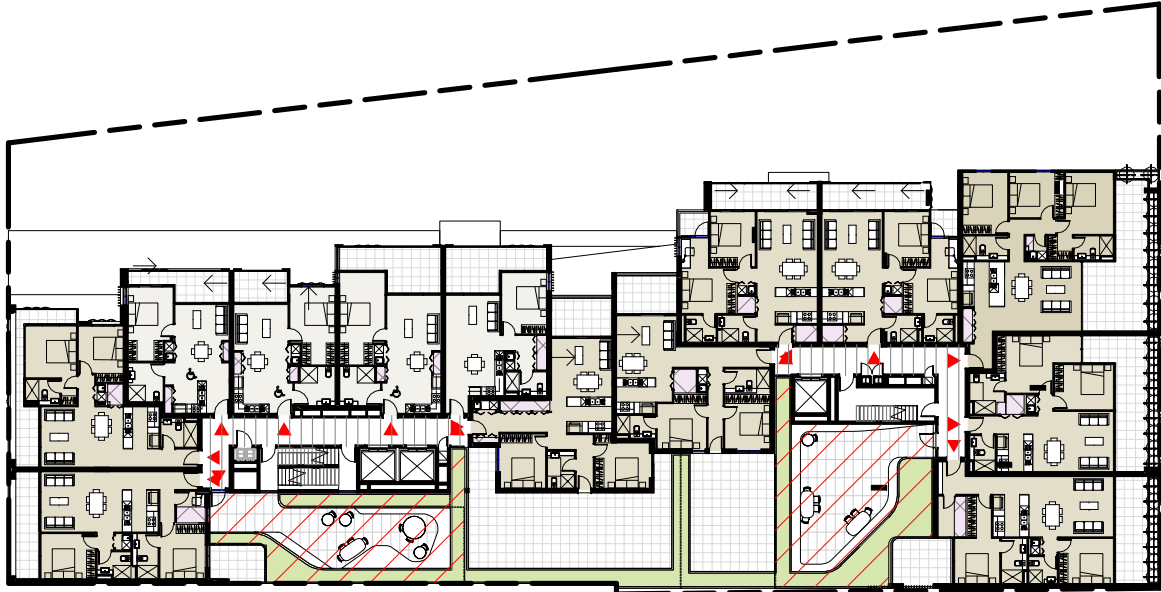
SOLAR ACCESS

Min. Requirement	Compliance
Min. 70% of units receive 2hrs direct sunlight between 9am and 3pm mid winter to living rooms and P.O.S. (75.6 units)	complies 80% - 87 units
Max. 15% of apartments receive no direct sunlight between 9 am and 3pm at mid winter. (16.2 units)	complies 14% - 15 units

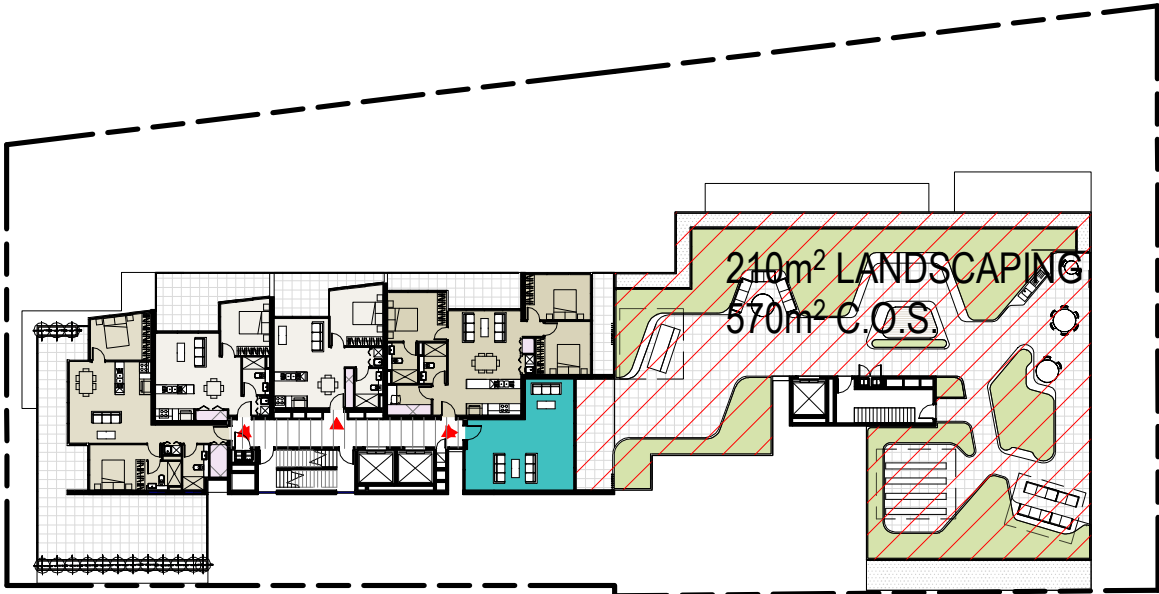
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1 | Landscaping Ground Floor
1 : 500



2 | Landscaping Level 1
1 : 500



3 | Landscaping Level 6
1 : 500

AREAS			
	Required	Achieved	Compliance
Deep soil landscaping	7% of site (181m²)	7% of site (183m²)	Complies
Landscape on structure		L1 - 98m² L6 - 210m²	
Total Landscaping		491m²	
Communal open space	25% of site (646.5m²)	L1 - 202m² L6 - 570m² TOTAL: 774m²	Complies

LEGEND
 Deep soil landscaping
 Landscape on structure
 Communal open space

brewster

murray

3

Architecture
Interiors
Urban Design
Project Management

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Sydney NSW 2000
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brewstermurray.com.au

Rev		
Issue	Date	Description
C	04.03.19	Preliminary Issue
D	29.03.19	Preliminary Issue
E	24.04.19	DA Submission
F	19.07.19	DA Resubmission
G	22.10.19	Issue for Coordination
H	08.01.19	Issue for DA RFI
I	25.03.20	DRP Revision

Consultants

Client
F. R. DEVELOPMENT

Project
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing
Landscaped Areas



Scale
1 : 500 @ A3

Date
2020

Project No.
19-6059
Issued for
DA

Drawing No.
A504 / I

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1 Northern Perspective



2 Kenny Street Perspective

<div><div>brewster murray</div><div><div></div><div></div><div></div></div></div> <div>Architecture Interiors Urban Design Project Management ABN 63 804 200 206 99 York Street Sydney NSW 2000 Australia +612 9299 0988 brewstermurray.com.au</div>	Rev		Consultants	Client	Project	Drawing	North	Scale	Date	Project No.	Drawing No.
	Issue	Date	Description	F. R. DEVELOPMENT	Mixed Use Development 264-268 Keira St & 23 Kenny St, Wollongong	Perspective Views 1		@ A3	2020	19-6059	A601 / I
	C	04.03.19	Preliminary Issue								
	D	29.03.19	Preliminary Issue								
	E	24.04.19	DA Submission								
	F	19.07.19	DA Resubmission								
	G	22.10.19	Issue for Coordination	Issued for DA							
	H	08.01.19	Issue for DA RFI								
	I	25.03.20	DRP Revision								

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1 | Northern Perspective 2



2 | Keira Street Perspective

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murray

3

Architecture
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Rev			Consultants
Issue	Date	Description	
C	04.03.19	Preliminary Issue	
D	29.03.19	Preliminary Issue	
E	24.04.19	DA Submission	
F	19.07.19	DA Resubmission	
G	22.10.19	Issue for Coordination	
H	08.01.19	Issue for DA RFI	
I	25.03.20	DRP Revision	

Consultants

Client
F. R. DEVELOPMENT

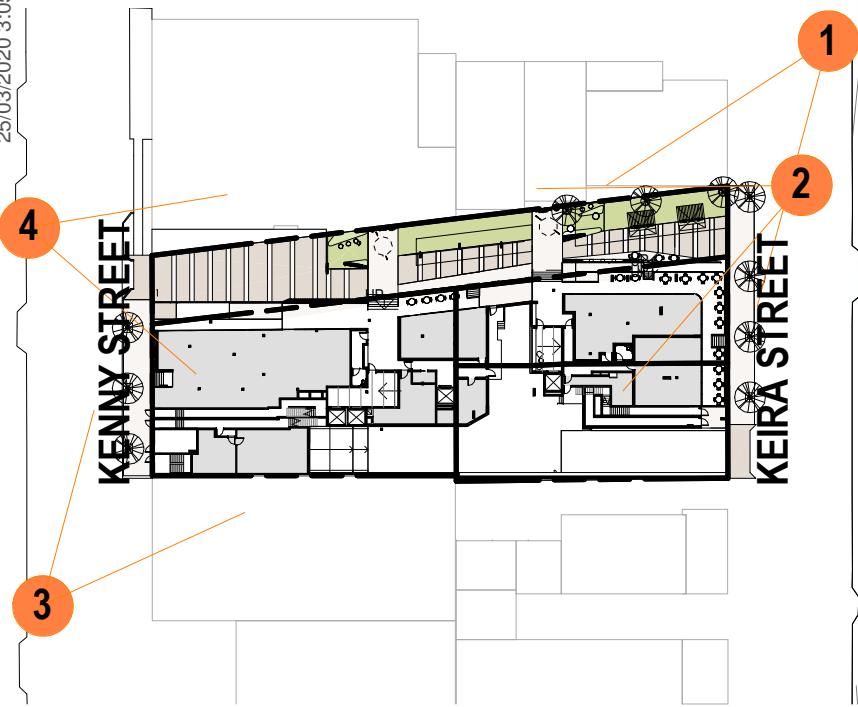
Project
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing
Perspective Views 2

North	Scale	Date	Project No.	Drawing No.
	@ A3	2020	19-6059	A602 / I
			Issued for	
			DA	

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1| Keira Street View (1)



3| Kenny Street View (3)



Architecture
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Project Management

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Rev	Issue	Date	Description
C	D	04.03.19	Preliminary Issue
D	D	29.03.19	Preliminary Issue
E	D	24.04.19	DA Submission
F	D	19.07.19	DA Resubmission
G	D	22.10.19	Issue for Coordination
H	D	08.01.19	Issue for DA RFI
I	D	25.03.20	DRP Revision

Consultants

Client

F. R. DEVELOPMENT

Project

Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing

Street View Perspectives

North



Scale

1 : 1000 @ A3

Date

2020

Project No.

19-6059

Drawing No.

A603 / I

Issued for

DA

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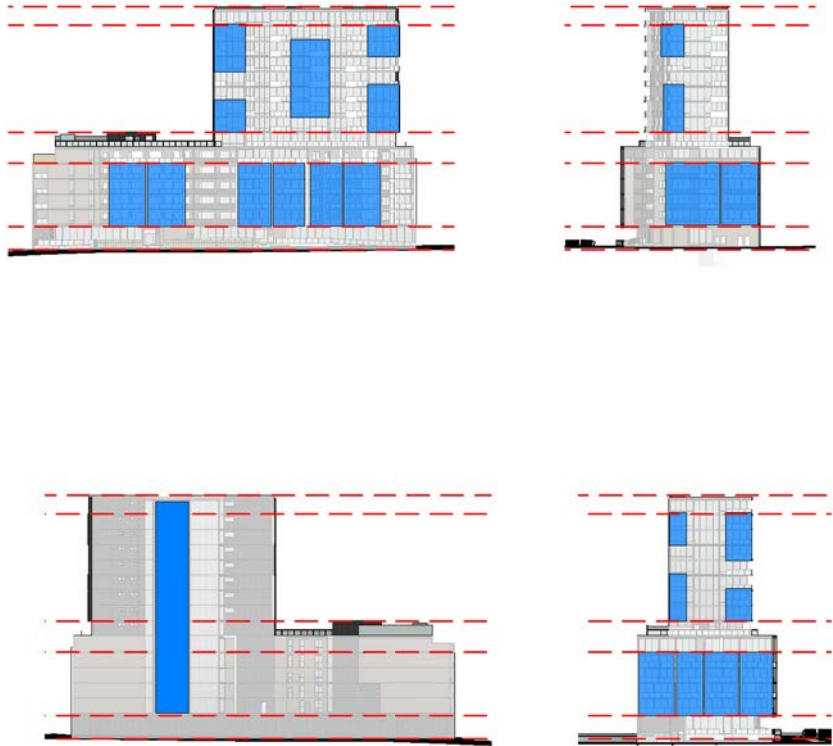
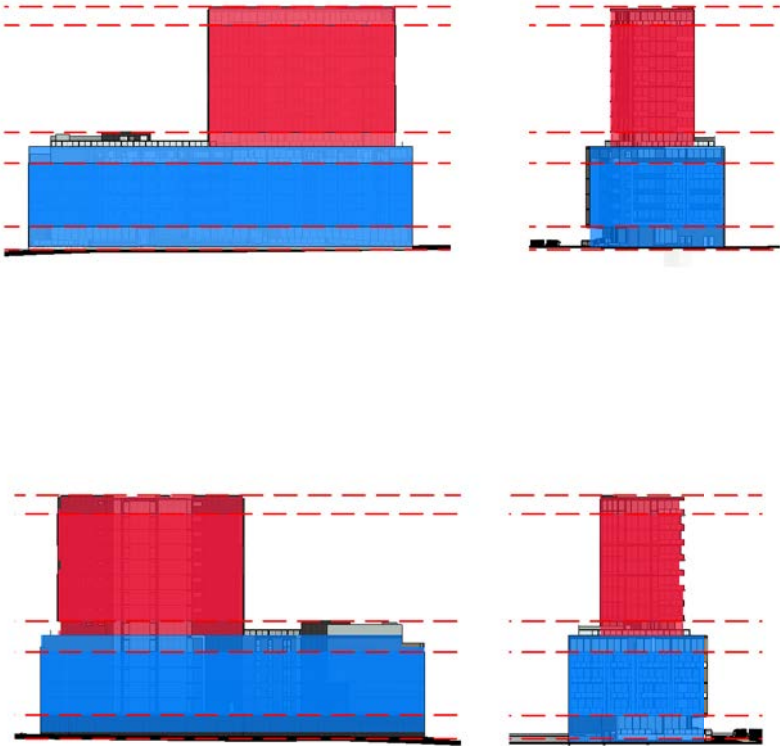
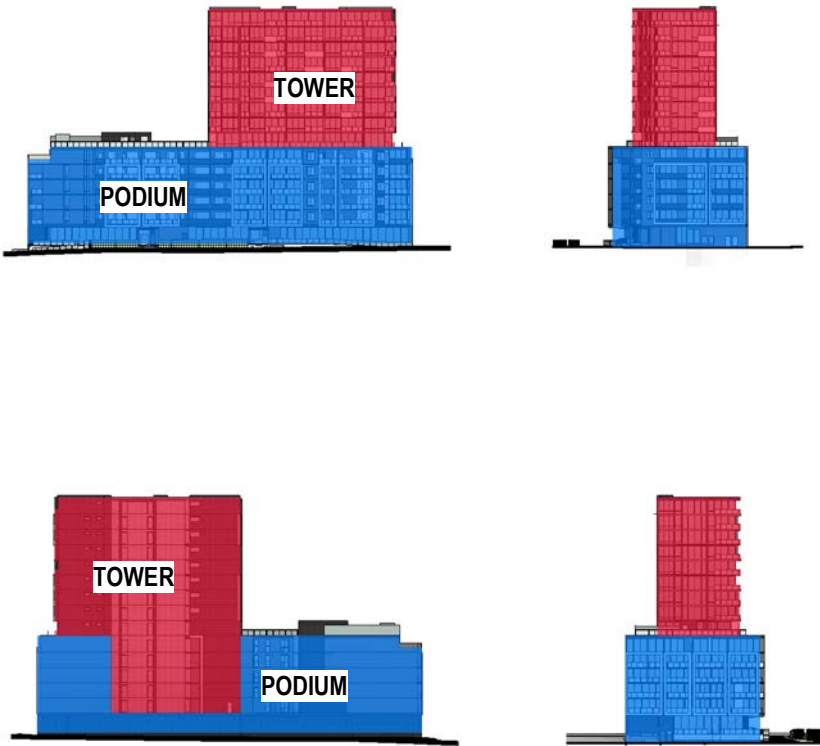
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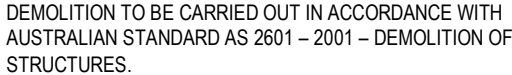
CONCEPT LEGEND

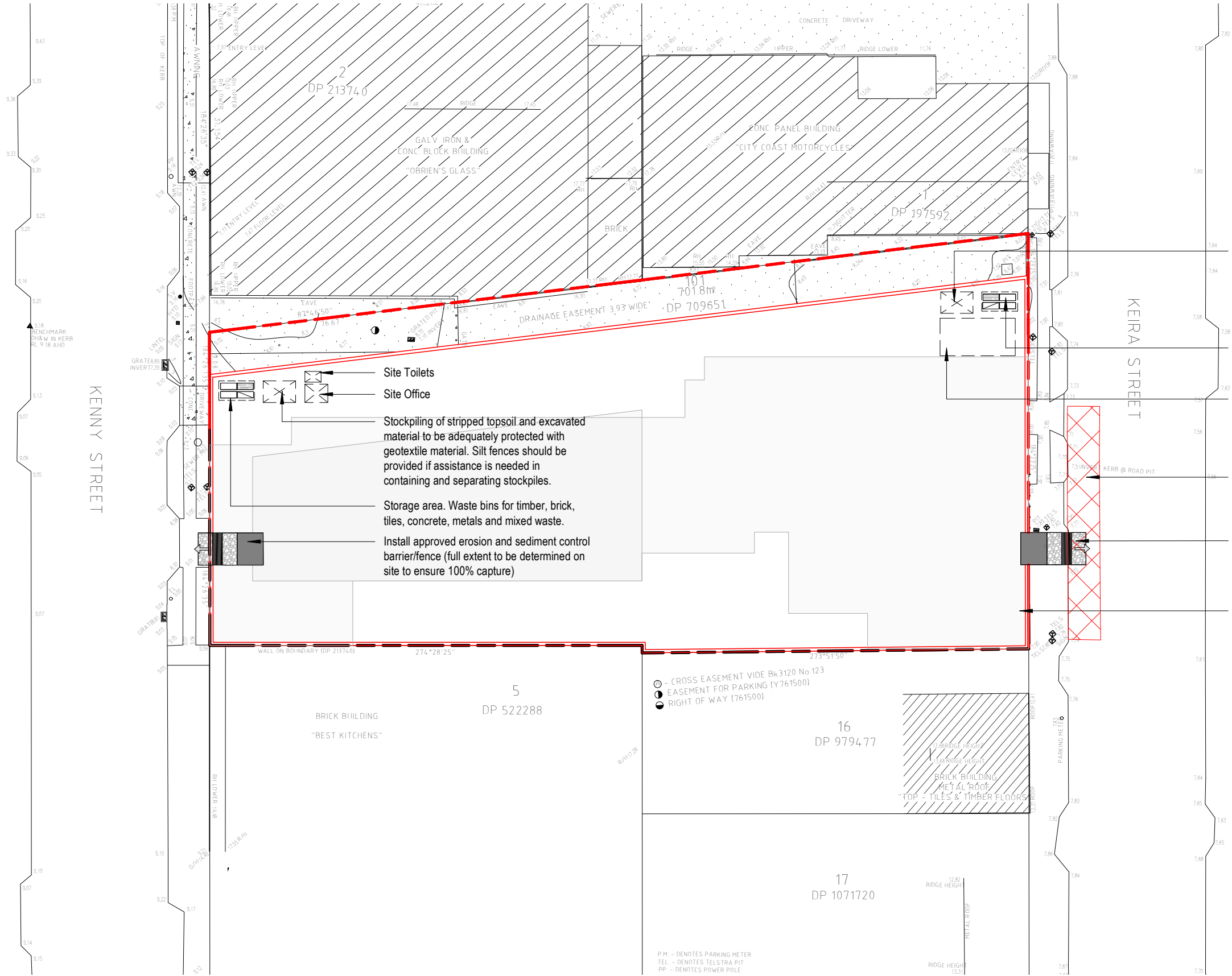
1. PODIUM + TOWER
The podium and tower are defined as two distinct architectural elements.

2. BULK + SCALE
The elevations are divided into smaller bulks, allowing the building scale to read harmoniously. The ground floor, level 6 and top floor act as buffer zones that reduce the visual mass of the form.

3. ACTIVITY FRAMES
Within the divided scale, frames are placed to highlight active zones (balconies) and reduce the appearance of blank facades.







Stockpiling of stripped topsoil and excavated material to be adequately protected with geotextile material. Silt fences should be provided if assistance is needed in containing and separating stockpiles.

Storage area. Waste bins for timber, brick, tiles, concrete, metals and mixed waste.

Wash down area for trucks removing excavation rock to prevent tracking of sediment off site

Designated 'construction zone' for loading & unloading

Install approved erosion and sediment control barrier/fence (full extent to be determined on site to ensure 100% capture)

Provide 'A' class hoarding to site boundaries under construction. pre fabricated chain wire (temp fencing) - chain wire sections connected to prefabricated galvanized steel post frames and supported by precast concrete 'feet'. all gates to open into site.

264 - 268 Keira St & 23 Kenny St Wollongong

Landscape Development Application

Drawing Schedule

Drawing Number	Drawing Title	Scale
000	Landscape Coversheet	N/A
101	Landscape Plan Ground & Public Domain	1:125
102	Landscape Plan L1	1:100
103	Landscape Plan L3	1:100
104	Landscape Plan L5	1:100
105	Landscape Plan L6	1:100
501	Landscape Details	As Shown

Plant Schedule

Symbol	Botanic Name	Common Name	Mature Height (m)	Mature Width (m)	Spacing	Pot Size	Quantity
GROUND FLOOR							
Trees							
MLG	Magnolia grandiflora 'Little Gem'	Dwarf Magnolia	5	3	As Shown	100L	3
WS	Waterhousea floribunda 'Sweeper'	Sweeper Waterhousea	10	7	As Shown	200L	7
Shrubs							
Ri	Raphiolepis indica 'Oriental Pearl'	Oriental Pearl Indian Hawthorn	0.9	1	As Shown	300mm	20
Accents							
Ai	Alcantarea imperialis 'Rubra'	Bromeliad	1	1	As Shown	300mm	13
By	Beschorneria yuccoides	Mexican Lily	1.5	2	As Shown	300mm	15
Groundcovers/ Grasses							
DSF	Dichondra 'Silver Falls'	Dichondra	0.15	Spreading	5/m2	140mm	23
LEG	Liriope 'Evergreen Giant'	Giant Liriope	0.6	0.6	5/m2	140mm	49
Tj	Trachelospermum jasminoides	Star Jasmine	0.2	1	5/m2	140mm	32
LEVEL 1							
Trees							
Bn	Betula nigra	Tropical Birch	10	4	As Shown	200L	2
MLG	Magnolia grandiflora 'Little Gem'	Dwarf Magnolia	5	3	As Shown	100L	2
WS	Waterhousea floribunda 'Sweeper'	Sweeper Waterhousea	10	7	As Shown	200L	3
Shrubs							
CGF	Callistemon 'Great Balls of Fire'	Bottlebrush	2	2	As Shown	300mm	15
Ri	Raphiolepis indica 'Oriental Pearl'	Oriental Pearl Indian Hawthorn	0.9	1	As Shown	300mm	45
Vo	Viburnum odoratissimum	Sweet Viburnum	3	2	As Shown	300mm	100
Accents							
Ai	Alcantarea imperialis 'Rubra'	Bromeliad	1	1	As Shown	300mm	17
By	Beschorneria yuccoides	Mexican Lily	1.5	2	As Shown	300mm	33
PX	Philodendron Xanadu	Xanadu	1	1	As Shown	300mm	97
Groundcovers/ Grasses							
LEG	Liriope 'Evergreen Giant'	Giant Liriope	0.6	0.6	5/m2	140mm	33
PE	Poa 'Eskdale'	Tussock Grass	0.6	0.6	5/m2	140mm	19
PK	Poa 'Kingsdale'	Blue Tussock Grass	0.5	0.5	5/m2	140mm	10
Tj	Trachelospermum jasminoides	Star Jasmine	0.2	1	5/m2	140mm	107
LEVEL 3							
Accents							
Ai	Alcantarea imperialis 'Rubra'	Bromeliad	1	1	As Shown	300mm	13
By	Beschorneria yuccoides	Mexican Lily	1.5	2	As Shown	300mm	8
PX	Philodendron Xanadu	Xanadu	1	1	As Shown	300mm	37
LEVEL 5							
Accents							
Ai	Alcantarea imperialis 'Rubra'	Bromeliad	1	1	As Shown	300mm	14
By	Beschorneria yuccoides	Mexican Lily	1.5	2	As Shown	300mm	11
PX	Philodendron Xanadu	Xanadu	1	1	As Shown	300mm	79
LEVEL 6							
Trees							
Ca	Cupaniopsis anacardioides	Tuckaroo	8	4	As Shown	100L	4
MLG	Magnolia grandiflora 'Little Gem'	Dwarf Magnolia	5	3	As Shown	100L	6
Shrubs							
Ob	Ocimum basilicum	Basil	0.6	0.3	As Shown	300mm	5
Ro	Rosmarinus officinalis	Rosemary	0.5	0.3	As Shown	150mm	5
Ts	Thymus spp	Thyme	0.3	0.3	As Shown	300mm	3
Vo	Viburnum odoratissimum	Sweet Viburnum	3	2	As Shown	300mm	119
Accents							
Aa	Agave Attenuata	Agave	1	1	As Shown	300mm	49
Ai	Alcantarea imperialis 'Rubra'	Bromeliad	1	1	As Shown	300mm	30
By	Beschorneria yuccoides	Mexican Lily	1.5	2	As Shown	300mm	54
PX	Philodendron Xanadu	Xanadu	1	1	As Shown	300mm	94
Groundcovers/ Grasses							
LEG	Liriope 'Evergreen Giant'	Giant Liriope	0.6	0.6	5/m2	140mm	131
PE	Poa 'Eskdale'	Tussock Grass	0.6	0.6	5/m2	140mm	80
PK	Poa 'Kingsdale'	Blue Tussock Grass	0.5	0.5	5/m2	140mm	68
Tj	Trachelospermum jasminoides	Star Jasmine	0.2	1	5/m2	140mm	349

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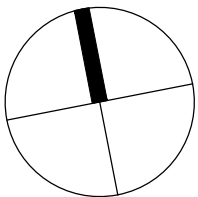
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E	Architectural Coordination	SM	NM	20.03.2020
D	Architectural Coordination	SM	NM	11.03.2020
C	Architectural Coordination	SM	NM	24.10.2019
B	For submission	LM	NM	29.04.2019
A	Draft for comment	LM	NM	09.04.2019
Issue	Revision Description	Drawn	Check	Date

LEGEND

Key Plan:



Client:
F.R Development

Project:
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

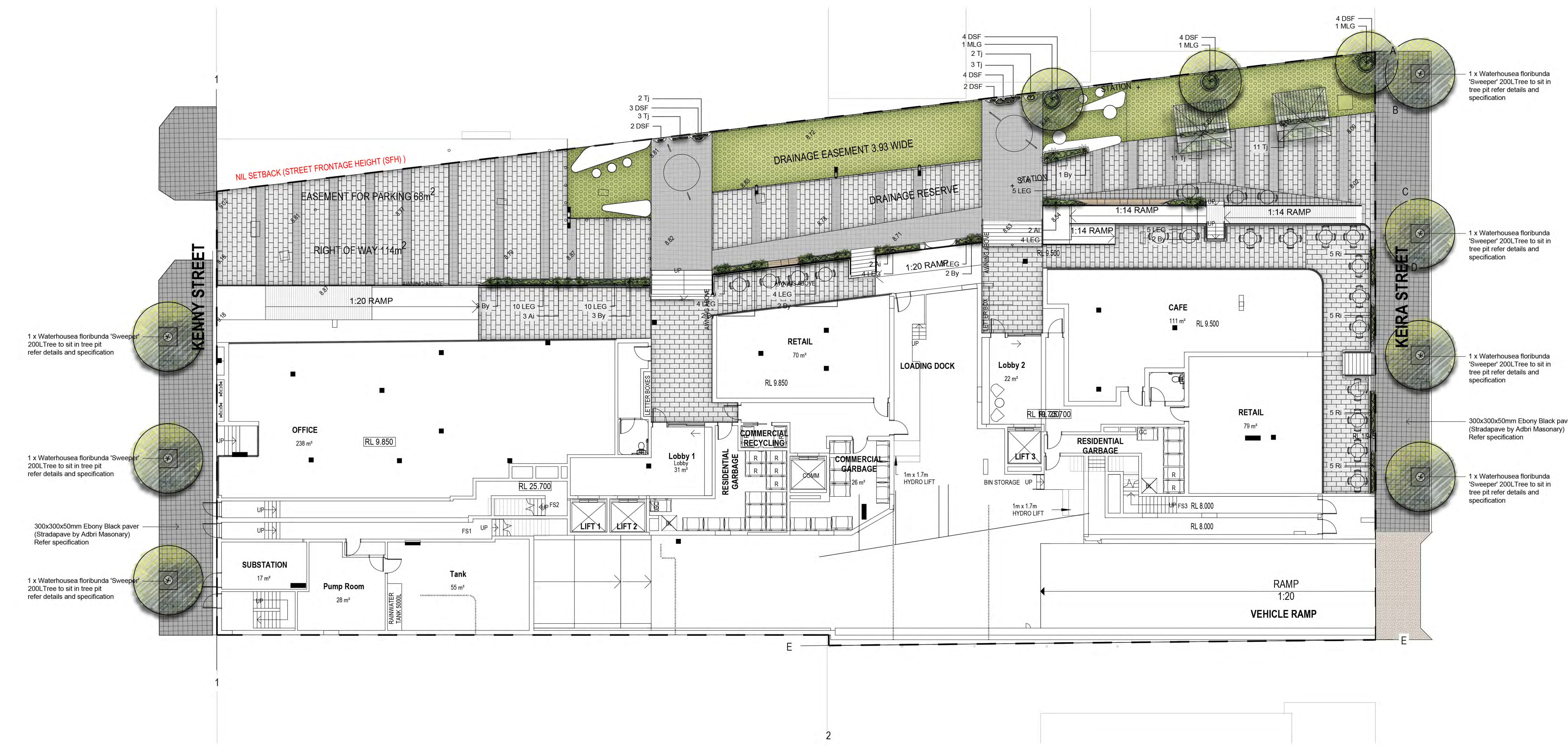
Drawing Name:
Coversheet

Scale:
Job Number:
Drawing Number:
Issue:

PRELIMINARY

SS19-4075

000 E



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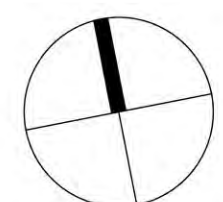
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A	Draft for comment	LM	NM	09.04.2019
Issue	Revision Description	Drawn	Check	Date

LEGEND	
	Property Boundary
	Proposed Tree (Refer Plant Schedule)
	Steel Edge
	Shrubs/Accents (Refer Plant Schedule)
	Grasses & Groundcovers (Refer Plant Schedule)
	Gravel
	Paving
	Turf Cell

Key Plan:



SITE IMAGE
Landscape Architects
Level 1, 3-5 Baptist Street
Redfern NSW 2016
Australia
Tel: (61 2) 8332 5600
Fax: (61 2) 9668 2877
www.siteimage.com.au

Client:
F.R Development

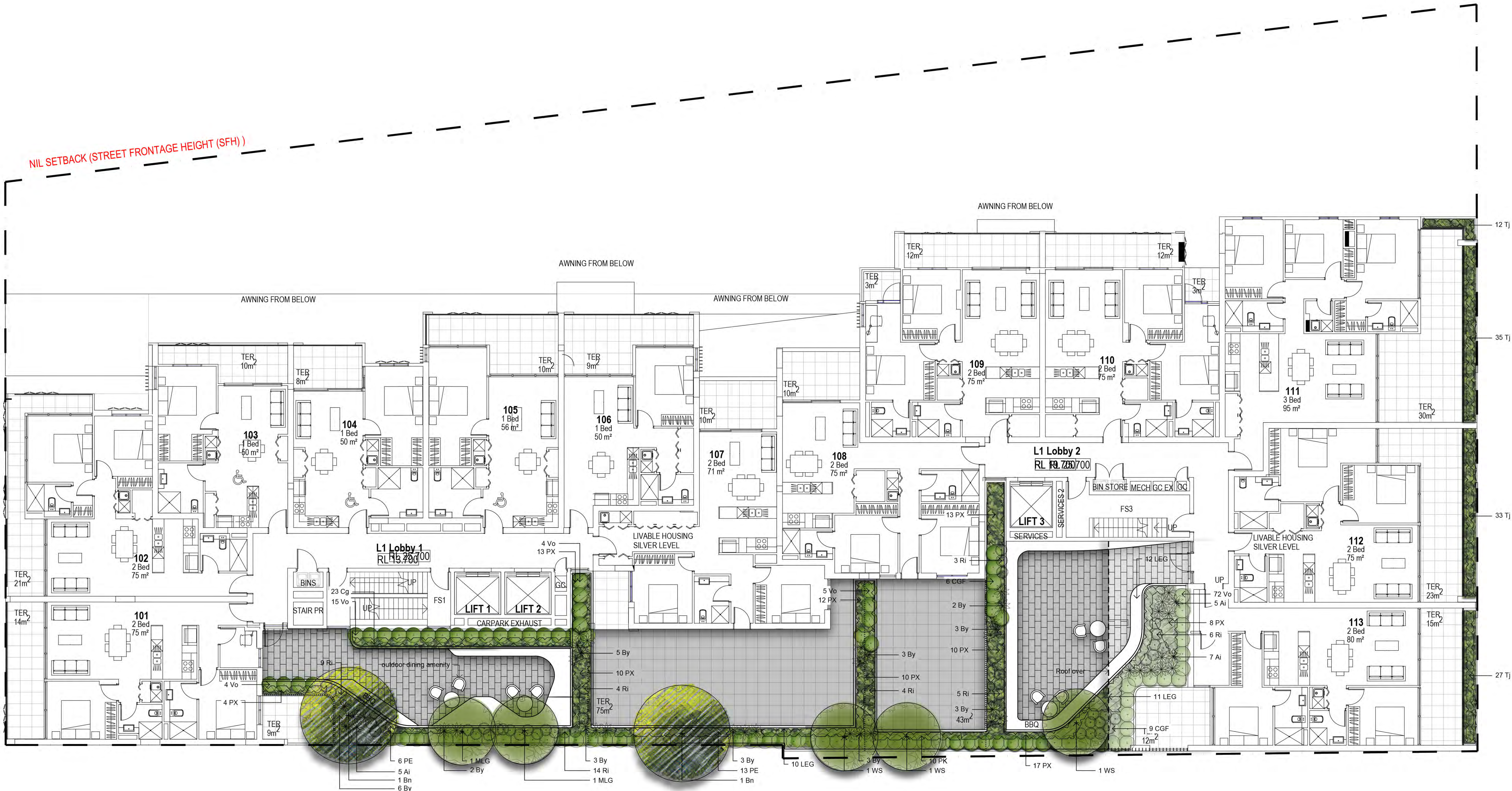
Project:
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing Name:
Landscape Plan
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Job Number:
SS19-4075

PRELIMINARY

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Issue:
101 E



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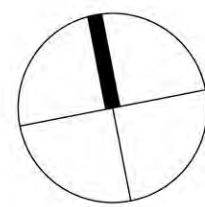
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E	Architectural Coordination	SM	NM	11.03.2020
D	Architectural Coordination	SM	NM	24.10.2019
C	For submission	LM	NM	08.05.2019
B	For submission	LM	NM	29.04.2019
A	Draft for comment	LM	NM	09.04.2019
Issue	Revision Description	Drawn	Check	Date

LEGEND	
	Property Boundary
	Proposed Tree (Refer Plant Schedule)
	Steel Edge
	Shrubs/Accents (Refer Plant Schedule)
	Grasses & Groundcovers (Refer Plant Schedule)
	Gravel
	Paving
	Turf Cell

Key Plan:



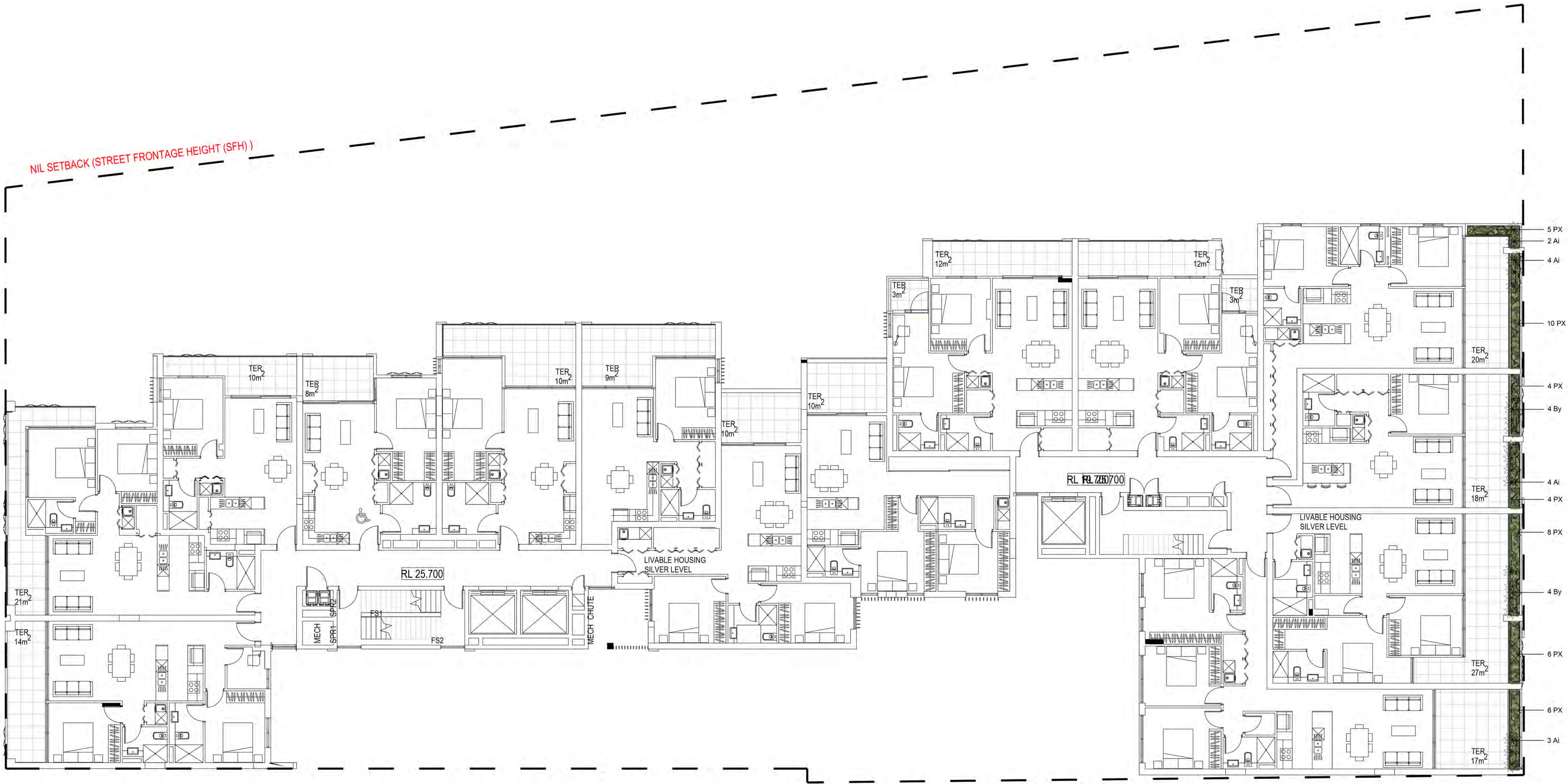
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Landscape Plan
Level 1

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SS19-4075
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Issue:
F



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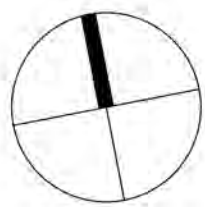
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LEGEND	
	Property Boundary
	Proposed Tree (Refer Plant Schedule)
	Steel Edge
	Shrubs/ Accents (Refer Plant Schedule)
	Grasses & Groundcovers (Refer Plant Schedule)
	Gravel
	Paving
	Turf Cell

Key Plan:



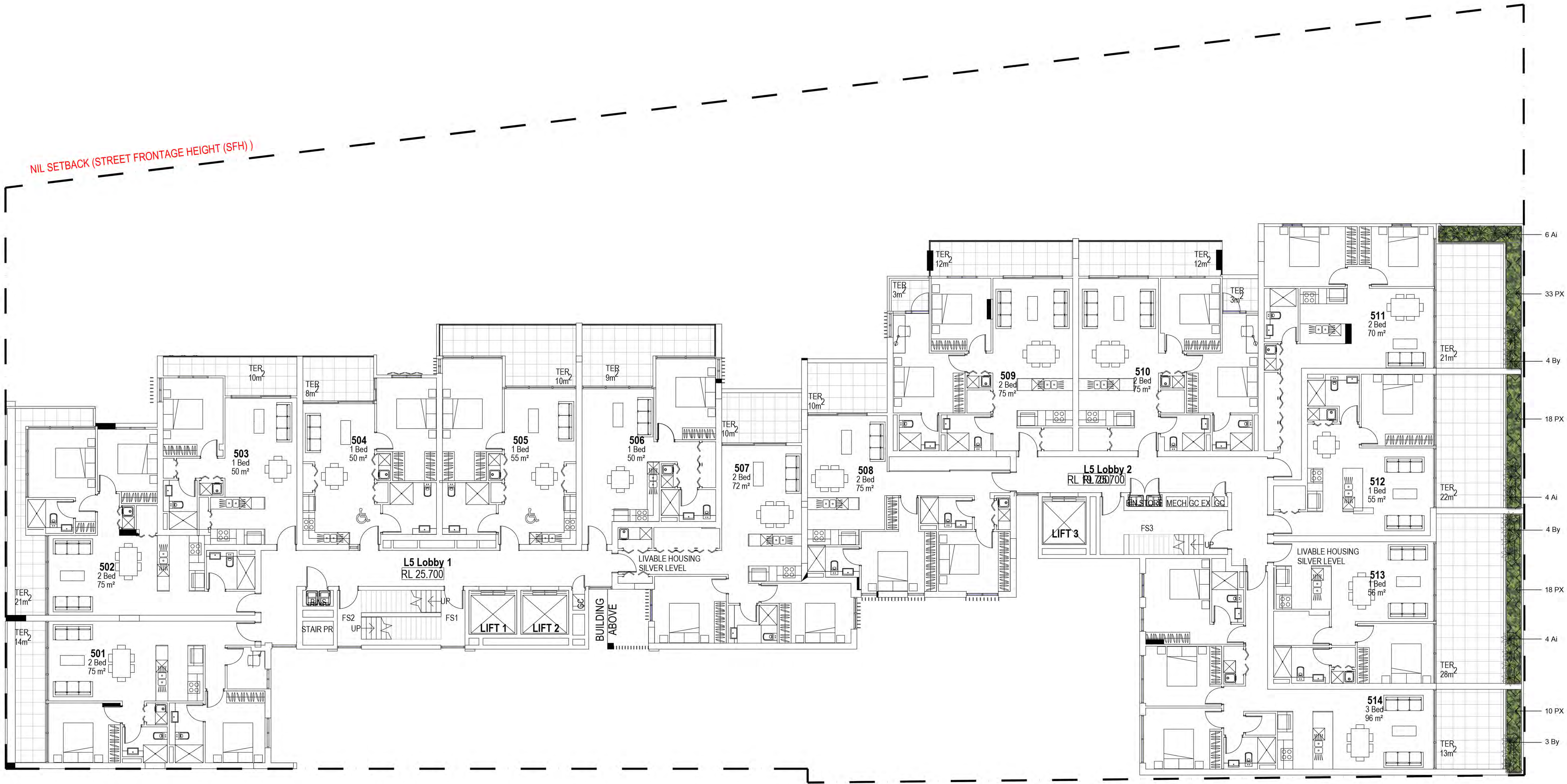
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Drawing Name:
Landscape Plan
Level 3

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Drawing Number:
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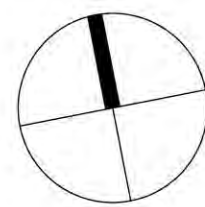
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LEGEND

	Property Boundary		Shrubs/Accents (Refer Plant Schedule)		Paving
	Proposed Tree (Refer Plant Schedule)		Grasses & Groundcovers (Refer Plant Schedule)		Turf Cell
	Steel Edge		Gravel		

Key Plan:



SITE IMAGE



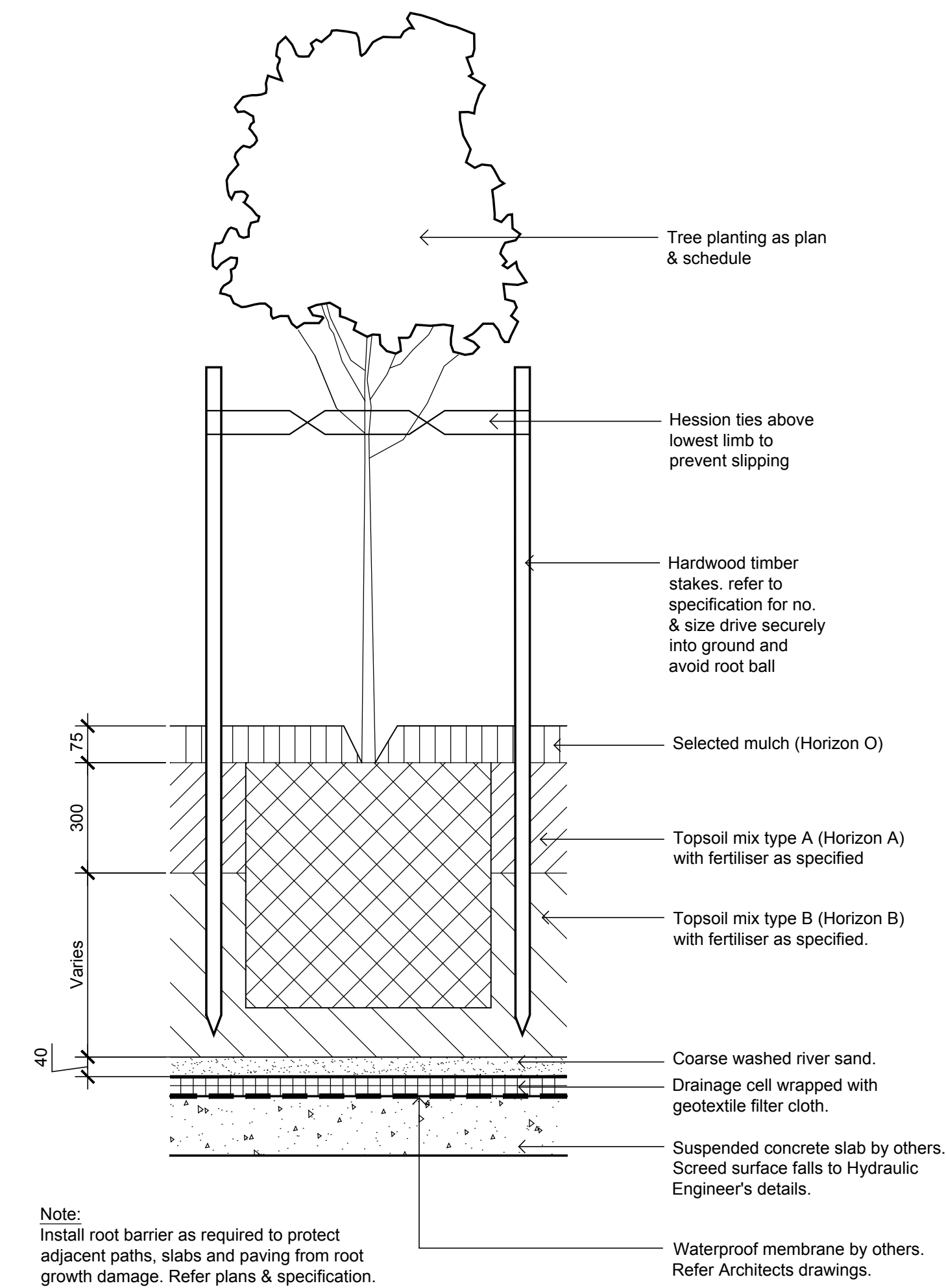
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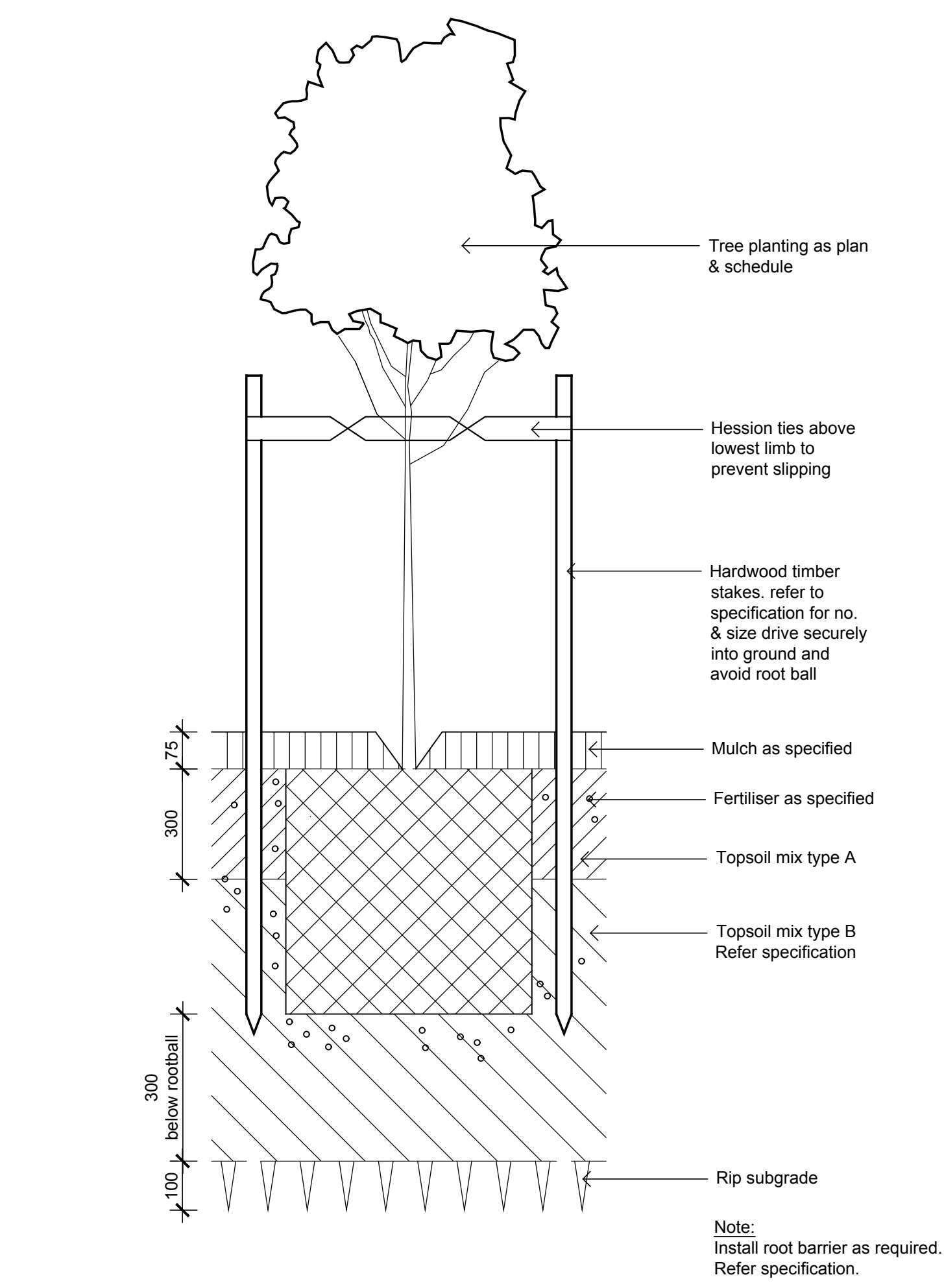
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Drawing Name:
Landscape Plan
Level 5

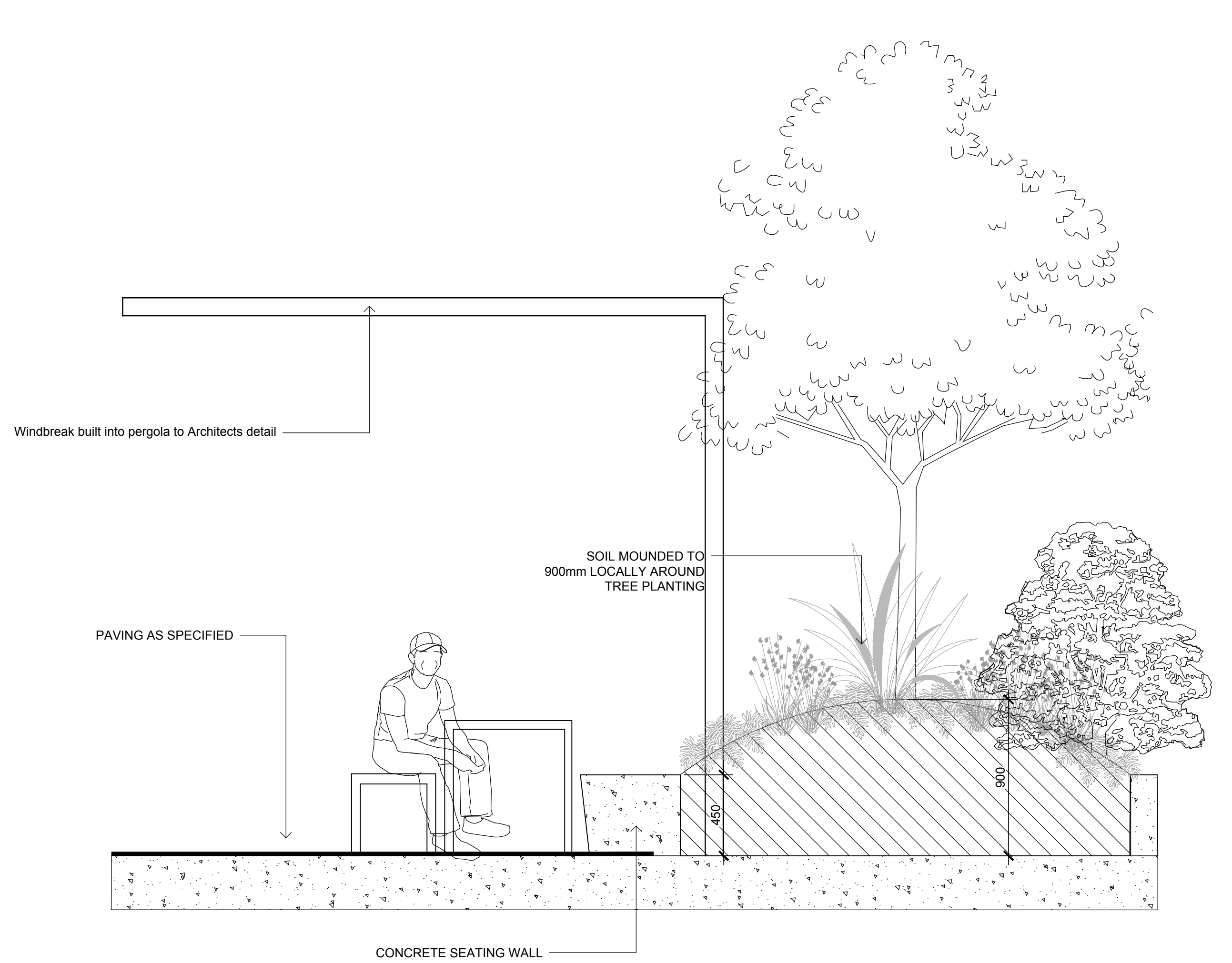
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Drawing Number: 104
Issue: E



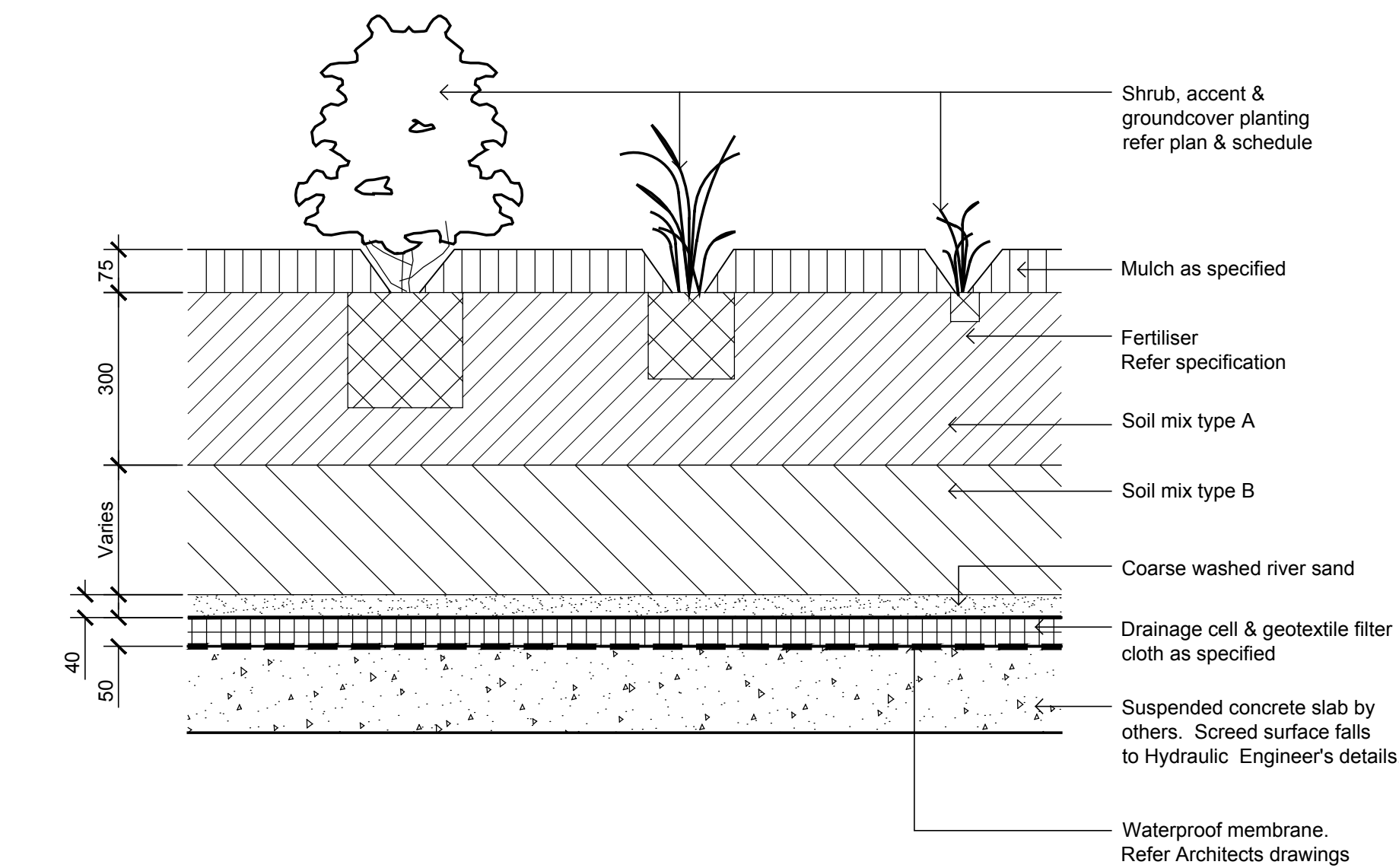
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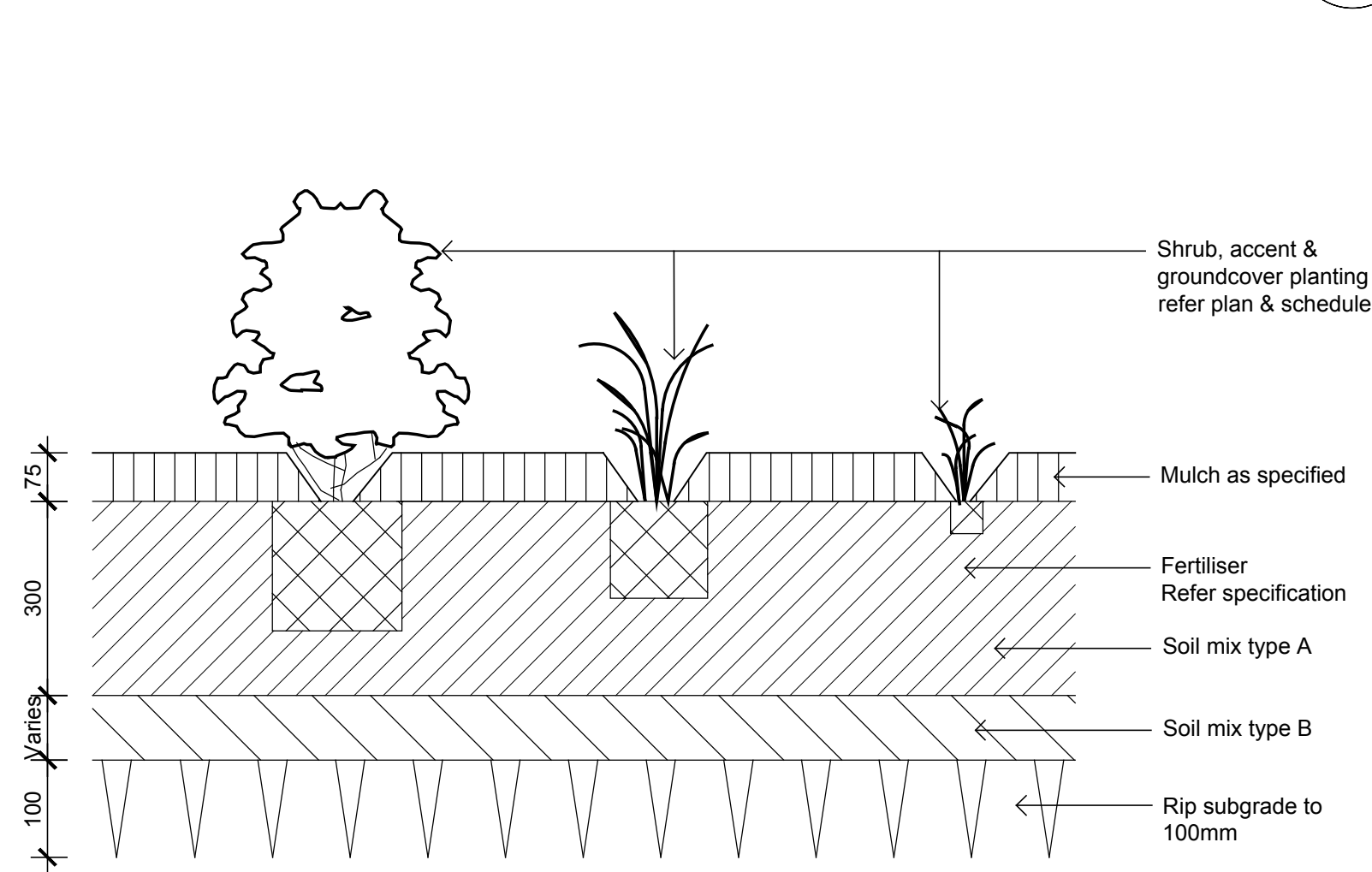
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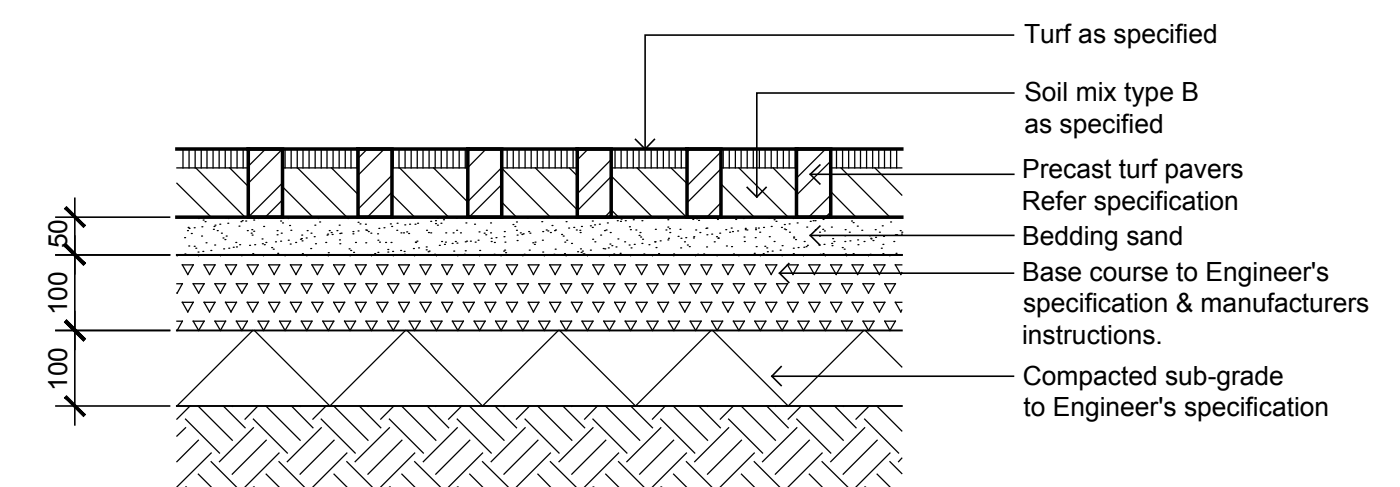
S1 LEVEL 6 - SECTION
501 SCALE 1:20



Detail Shrub Accent & Groundcover Planting on Structure
1:10



Detail Shrub Accent & Groundcover Planting on Grade
1:10



TURF PAVERS ON GRADE
SCALE 1:10

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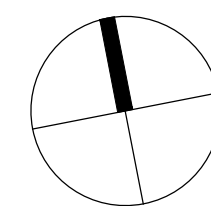
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B	For submission	LM	NM	29.04.2019
A	Draft for comment	LM	NM	09.04.2019
Issue	Revision Description	Drawn	Check	Date

LEGEND

Key Plan:



Client:
F.R Development

Project:
Mixed Use Development
264-268 Keira St & 23
Kenny St, Wollongong

Drawing Name:
Landscape Details

Scale:
Job Number:
SS19-4075

Drawing Number:

Issue:

501 D



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Amended Statement of Environmental Effects

**Proposed Multi-level Mixed Use
(Commercial/Residential) Development**

**264-268 Keira Street & 23 Kenny Street,
Wollongong**

Submitted to Wollongong City Council
On behalf of FR Management Pty Ltd.

December 2019



Subject		Amended Statement of Environmental Effects
In respect of		Proposed Multi-level Mixed Use (Commercial/Residential) Development
Property		264-268 Keira Street & 23 Kenny Street, Wollongong NSW 2500
Prepared for		FR Management Pty Ltd.
Prepared by		MMJ Wollongong Town Planning Consultancy Division 6-8 Regent Street Wollongong NSW 2500 Telephone: (02) 4229 5555 Facsimile: (02) 4226 5741
Contact		Luke Rollinson BUrbRegPlan DipArchTech MPIA Director - Town Planner
Job No.		19.08
Dated		December 2019

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Appendices

1. Exceptions to Development Standards Justification Statement



1 Introduction

1.1 Overview

This amended Statement of Environmental Effects (SEE) has been prepared in support of a Development Application (DA) to be submitted to Wollongong City Council (the Council) for the proposed demolition of existing structures and construction of a new multi-level mixed use development at 264-268 Keira Street and 23 Kenny Street, Wollongong (the site).

The site comprises of four (4) individual allotments (legally referred to as Lot 101 DP 709651, Lot 1 DP 800021, Lot 4 DP 522288, and Lot 100 DP 1130021) which will be amalgamated to form the development parcel. It is located directly opposite McCabe Park in southern precinct of Wollongong City Centre.

The DA seeks consent to undertake the following works:

- Demolition of all existing buildings/structures;
- Construction of a new fifteen (15) storey mixed use commercial/residential development, consisting of two (2) levels of basement parking, ground floor commercial/retail premises, with residential apartments above (i.e. shop top housing);
- Residential component comprises five (5) levels of podium residential units with a setback residential tower above, to provide 107 residential apartments in total;
- Dwelling mix includes thirty-six (36) x one (1) bedroom, fifty-six (56) x two (2) bedroom apartments, twelve (12) x three (3) bedroom apartments and three (3) x four (4) bedroom apartments;
- Podium level(s) communal open space and garden areas; and
- Basement parking over two (2) levels for a total of 140 cars, with additional bike (48 spaces) and motorbike (8 spaces) parking.

This SEE has been prepared by MMJ Wollongong on behalf of FR Management Pty Ltd. It is based on the Architectural Plans provided by Brewster Murray Architecture and other supporting technical information attached/appended to this report.

The DA and SEE have been prepared in accordance with the *Environmental Planning and Assessment Act 1979 (EPAA 1979)* and the *Environmental Planning and Assessment Regulation 2000 (EPAR 2000)*.

The SEE addresses the relevant matters for consideration listed under *Section 4.15* of the *Environmental Planning and Assessment Act 1979 (EPAA 1979)* and provides an assessment of the proposed development against the applicable planning controls.



The key planning controls include:

- *NSW Heritage Act 1977*
- *State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development;*
- *State Environmental Planning Policy (State and Regional Development) 2011;*
- *State Environmental Planning Policy No 55 - Remediation of Land;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy (Coastal Management) 2018;*
- *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004;*
- *Wollongong Local Environmental Plan 2009 (WLEP2009); and*
- *Wollongong Development Control Plan 2009 (WDCP2009).*

The site is located within Zone B3 Commercial Core under the *WLEP 2009*. The proposal and land use is permissible with development consent as shop top housing, and is compatible with the objectives of the zone.

The site is not a heritage item but is located adjacent to McCabe Park, which is listed in *Schedule 5* of the *WLEP 2009*. The mitigation of any solar impact on the heritage item is ensured through compliance with *Clause 8.3* of *WLEP 2009*. Council records indicate the site may contain potential European Archaeological artefacts relating to the historical drainage easement. As such, a Historical Heritage Assessment & Statement of Heritage Impact has been prepared by Austral Archaeology and is attached to this application.

The site is identified as being affected by flood (Medium and High Flood Risk Precinct) having a significant bearing on the project requiring “*no encroachment into the High Flood Risk Precinct area, no reduction in conveyance capacity of the site, and no increase in flooding elsewhere, as a result of the development. The overland flow path through the site will need to be maintained.*” (Pre-lodgement notes – PL-2018/235). An updated independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd and is attached to this application.

The proposal complies with the applicable development standards in terms of the maximum building height of 48m and the maximum floor space ratio (FSR) of 3:66:1. It satisfies the minimum street frontage requirement of 20m, however, it technically fails to meet the minimum 16m building separation requirement contained in the Wollongong City Centre provisions (i.e. *Clause 8.6(3)(b)* of the *WLEP 2009*).

A written request to justify an exception to the above-mentioned development standard has been prepared under *Clause 4.6* of *WLEP 2009* to demonstrate that compliance is unreasonable or unnecessary in the circumstances, and that there are sufficient environmental planning grounds to justify the proposed non-compliance (refer *Appendix 1*).



The proposed development is generally consistent with the relevant objectives and development design controls contained within both *SEPP 65* and the *WDCP 2009*, with the exception of some minor non-compliances which are outlined in the environmental assessment in *Section 6* of this report.

The proposal will not give rise to any significant adverse impacts. The architectural and landscape design quality is of a high standard to ensure that the development will make a positive contribution to the locality.

The development will provide additional commercial/retail floorspace to strengthen the role and function of the Wollongong City Centre, as well as much needed housing supply to meet the needs of the community. In this regard, it responds to the Department of Planning and Environment's (DPE) projected need for 14,600 new homes in the Wollongong Local Government Area (LGA), as identified within the *Illawarra-Shoalhaven Regional Plan 2015*.

The proposed mix of one (1), two (2), three (3) and four (4) bedroom apartments will promote housing choice and varying ranges of affordability. The site is situated in an accessible location, close to shops, services, public transport and employment.

The Capital Investment Value (CIV) of the development is more than \$30 million and, as such, the Joint Regional Planning Panel (JRPP) will be the consent authority.

In light of the assessment undertaken, the merits of the proposal outweigh any potential adverse impacts. Therefore, development approval is warranted and we are seeking Council's favourable determination of the DA.

1.2 Scope and Structure

This SEE has been prepared in accordance with the requirements of *Schedule 1, Part 1* of the *EPAR 2000* and provides an assessment consistent with the relevant heads of consideration under *Section 4.15* of the *EPAA 1979*, as relevant to Council's assessment of the DA.

Accordingly, the SEE is structured as follows:

- *Section 1* provides an overview of the project and scope of the SEE;
- *Section 2* details the relevant background, preceding and including amendments to the DA;
- *Section 3* describes the site, locality and surrounding development;
- *Section 4* provides a detailed description of the proposal and associated works;
- *Section 5* identifies the environmental planning framework;
- *Section 6* provides an assessment of the proposal against the relevant controls, along with the likely impacts of the development; and

- Section 7 concludes that development approval is warranted.

1.3 Supporting Documentation

Input from various specialist consultants has been obtained in relation to the proposed development. As such, the following documentation is provided to support the DA:

Document	Prepared by
Architectural Drawings (amended)	Brewster Murray
Architectural Design Verification Statement	Brewster Murray
SEPP 65 Design Quality Statement	Brewster Murray
Finishes Schedule	Brewster Murray
Perspectives	Brewster Murray
Site Survey	C. Robson & Associates
Landscape (amended)	Site Image Landscape Architects
Civil Engineer/ Water Sensitive Urban Design (WSUD) (amended)	Adams Consulting Engineers
Traffic and Waste (amended)	Solution 1 Traffic
Access	Accessible Building Solutions
BASIX	Certified Energy
BCA	DPC Group
Flood (amended)	BMT Eastern Australia Pty Ltd
Acoustic (amended)	JHA
Fire Engineer	Fire Safety Studio
Historical Heritage Assessment & Statement of Heritage Impact (amended)	Austral Archaeology
Wind Consultant	Windtech
Contamination (amended)	Douglas Partners
Geotechnical	Alliance Geotechnical
Registered Quantity Surveyor's Cost Summary Report	Construction Consultants

Table 1: Documentation to Support the DA

The above information is included within the DA package to be submitted to Council.

Note: This SEE has been prepared for the purpose as described only and no part should be used for any other purpose and/or in any other context without prior approval from MMJ. Should any further information and/or discussion be required as a result of the advice contained within this report, please advise at the earliest convenience.

2.0 Background

The applicant has embarked upon an extensive design development process leading up to the lodgement of this DA. This has included numerous meetings with both Council and the Wollongong Design Review Panel (DRP), as detailed below. MMJ was not involved in the design preparation and consultation process however, has been supplied with the relevant meeting minutes/advice for consideration.

2.1 Design Review Panel Meetings

The applicant has attended two (2) DRP meetings (19 June 2018 and 9 October 2018) to present the initial concept plans and various iterations of the scheme in response to detailed feedback received, namely regarding the design quality principles contained within *Schedule 1 of SEPP 65* and *Design Excellence WLEP 2009*

This information has been carefully considered and addressed in the revised proposal. Where feedback provided by the DRP has not been adopted, it has been addressed in the relevant sections of this report. The main issues raised are attached and have been summarised in *Table 2* below, which also incorporates comments received from Council staff at the pre-DA meeting.

2.2 Pre-Development Application Meeting

On 9 April 2018, the applicant met with Wollongong City Council staff for a pre-DA meeting. The meeting notes provided by Council staff following the meeting indicate that Council support finalisation of the design and preparation of a DA, which addresses comments raised at the pre-DA meeting 9 April 2018 and the DRP meeting on 19 June 2018 and 9 October 2018. The meeting notes are included and key issues are reflected in *Table 2* below.

Summary of Key Issues Raised at Pre-DA and DRP		
Issue	Comments	Response
Design Response/Design Quality	<ul style="list-style-type: none"> - Flooding - Context: Establishing appropriate built form. - Compliance with Wollongong Local Environmental Plan 2009, Wollongong Development Control Plan 2009 and State Environmental Planning Policy No. 65 Apartment Design Guide. 	On the advice of specialist consultants, design changes have been undertaken address to design response, quality issues and compliance with Wollongong Local Environmental Plan 2009, Wollongong Development Control Plan 2009 and State Environmental Planning Policy No. 65 Apartment Design Guide.
Site Isolation, Context and Neighbourhood Character	<ul style="list-style-type: none"> - Comprehensive site analysis required 	A comprehensive site analysis has been provided.

Built Form and Scale	<ul style="list-style-type: none"> - Refinement of the drainage easement to provide an attractive cross site link / laneway that links Kenny street to the park. - Consideration in the expression between the break in podium base to provide a more dynamic building form. 	The drainage easement provides for an attractive cross site link through the development. The height, bulk and scale of the development is proportionate to site area and dimensions.
Building Separation	<ul style="list-style-type: none"> - Proposal seeks to vary building separation requirements in <i>WLEP 2009</i> where the building abuts the northern and southern boundaries of the site. 	Detailed within Compliance Summary provided in <i>Section 6</i> of this SEE.
Solar access and overshadowing	<ul style="list-style-type: none"> - Poor orientation due to requirements for openings and balconies. - Compliance with the minimum solar access requirements of the ADG 	The design has been refined to exceed solar access requirements. Detailed solar access diagrams provided as part of the DA to enable a full assessment.
Landscaping	<ul style="list-style-type: none"> - Proposed cross link - Southern roof garden - Main roof garden 	The design has been refined to provide appropriate landscaped spaces.
Amenity	<ul style="list-style-type: none"> - Equitable access - minimum dimensional requirements - Glazing should be reduced in area / screened to limit potential privacy issues. 	The design has been refined to ensure equitable access, minimum dimensions and privacy are met.
Safety	<ul style="list-style-type: none"> - Detailing of the undercroft area 	Refinement of the cross link has been provided ensuring CPTED is satisfied.
Housing Diversity and Social Interaction	<ul style="list-style-type: none"> - Pending further detail resolution 	The design has been refined to ensure equitable access and to provide for a wider range of housing through the provision of 1 – 4 bedroom units.
Aesthetics	<ul style="list-style-type: none"> - Facades to be refined to address the street - Consideration in regards to colour, materials and the extent / articulation of the exposed facades. 	The design has been refined to ensure an appropriate context and use of materials and colours is provided for the area and future characteristics of the area.
Heritage	<ul style="list-style-type: none"> - The proposed development is located adjacent to local heritage listed item McCabe Park - Clause 8.3 of <i>WLEP 2009</i> applies. This control cannot be varied by clause 4.6. - May also have European Archaeological potential relating to the historical drainage easement. 	The design has been refined to ensure compliance 8.3 of <i>WLEP 2009</i> A specialist consultant has been engaged to investigate potential European Archaeological within the drainage easement.
Flooding	<ul style="list-style-type: none"> - Council's records indicate the property is Flood Affected - Medium and High Flood Risk Precinct. - The overland flow path through the site will need to be maintained. 	Flood Report analysis has been provided to address relevant engineering requirements. The overland flow path has been maintained as the cross link to the north of the site.

Table 2 : Summary of Key Issues Raised at Pre-DA and DRP

2.3 Rejection of Development Application DA-2019/509

The Development Application was lodged to Wollongong Council on 23 May 2019 with the relevant architectural plans and documents and was rejected on 4 June 2019. The reasons for the refusal and the updated design response are reflected in *Table 3* below.

Summary of formal rejection of DA 2019/509 by Council		
Issue	Comments	Response
Fees	- The correct fees have not been paid	Fees to be paid in accordance with Councils fee schedule
Preliminary Soil Investigation	<ul style="list-style-type: none"> - further detailed investigation is required including soil sampling to better establish the extent and nature of contamination at the site. - The PSI does not provide sufficient certainty to confirm the extent of the historic use of the site, to locate the presence of contamination within the site, or to support a conclusion as to the extent of site contamination 	A detailed soil investigation has been prepared by Douglas Partners and submitted with the new development application.
Clause 8.3 WLEP 209 sun access plane	- Part of the building (architectural feature) appears to encroach on restricted area and therefore would be prohibited.	The design has been refined to ensure compliance with 8.3 of WLEP 2009. A Sun Plane protection diagram forms part of the architectural plans.
FSR	- application proposes a departure from a FSR and does not contain a submission under clause 4.6 of Wollongong Local Environmental Plan 2009	The design has been refined to ensure compliance with the FSR as defined and calculated in WLEP 2009
GFA	- The GFA cannot be discerned from the GFA plan as it does not have a key	The GFA has been refined for clarity.
4.6 Variation Statement	- The Clause 4.6 statement in relation to building separation does not adequately deal with unreasonable and unnecessary and environmental grounds.	The Clause 4.6 Statement has been amended to address unreasonable and unnecessary and environmental grounds.
Adjoining owners consent	- It is unclear as to whether owners consent will be required from adjoining land owners as the geotechnical report notes that if a temporary lateral retention system is provided by external anchors, permission will need to be obtained from the owners of adjoining properties.	This is a matter for the construction phase.

Table 3: Summary of Key Issues Raised in the Rejected Development Application

2.4 Request for Additional Information of Development Application DA-2019/748

The Development Application was lodged to Wollongong Council on 22 July 2019 with the relevant architectural plans and a request for additional information received 18th September 2019. MMJ have We have reviewed the matters in question, and the following is noted in response to those particular matters raised by Council and the responses are reflected in *Table 4* below.

Summary of formal rejection of DA 2019/509 by Council		
Issue	Comments	Response
Wollongong Design Review Panel, Meeting minutes and recommendations		
27-Aug-19		
Design Quality Principals SEPP 65	Comments	Action

Context and Neighbourhood Character	<i>Detailed site analysis to include context, streetscape, opportunities, constraints</i>	Brewster Murray has provided detailed site analysis including site context, site analysis, site constraints and opportunities, proposed future character and context, streetscape
Built form and scale	<i>Sub-ground works - verify construction and legal feasibility</i>	Legal advice has been received from Greg Lee of Redenbach Lee confirming legal feasibility of proposed sub-works. Refer attached to the application, as well as detailed plans prepared by Brewster Murray on areas within the drainage reserve for clarification
	<i>Through site link - design to include stair access points direct entry to building,</i>	Brewster Murray has proposed glass canopies structures to the residential lobby to improve way finding and identity
	<i>green wall at boundary where possible</i>	Brewster Murray have proposed green walls at boundary
	<i>extend kerb treatment to Kenny and Keira St</i>	Brewster Murray have proposed paving and planting to Kenny and Keira St
	<i>stepped shop front recess entries to allow for extra stairs, outdoor seating, variety to walkway</i>	Brewster Murray have proposed additional open riser stairs to the pedestrian access way to provide direct connections to building entry points
	<i>Provide further details of parking and easement</i>	Proposed parking easement separated from pedestrian cross site link to improve safety
	<i>planter boxes mounted on walkway edge</i>	Integrated seating and planters provide screening to the walkway edge and provide functionality
	<i>show roof over</i>	Weather protection is provided to pedestrians, shown dashed above entry areas
<i>low rise apartments</i>	<i>Full context analysis</i>	Full context analysis provided
<i>tower</i>	<i>Rectilinear tower with lesser setback to be explored</i>	Brewster Murray have explored a rectilinear option and concepts are provided, however, from an urban design perspective this is considered to be inferior to the preferred skewed option. The skewed option allows increased FSR and space efficiency to the tower but also provides better visual interest
Density	<i>Further external finess</i>	Brewster Murray have further refined the external façade appropriate scales and treatment between podium and tower
Sustainability	<i>Cross ventilation - no corridor</i>	complies 62% - 66 units
	<i>recommend removing two maisonette apartments - privacy and no sunlight concerns</i>	Apartment 514 double height apartment achieves solar access. Brewster Murray have removed 1 maisonette apartment and kept 1 to the top so that solar access is not compromised
	<i>PV panel array to roof</i>	PV panels provided at roof level
Landscape	<i>GF Public domain - respond to architectural form, lobbies, materials, levels, street trees, planting,</i>	Public domain incorporates street trees, public art to entry lobby areas, areas for public seating and planting and shaded areas for retail and café use
<i>Ground Floor</i>	<i>better creation of spaces, opportunities, for tree</i>	This ground floor area has been refined for better creation of spaces, however, trees are unable to be accommodated due to the existing pipes and flooding conditions within the drainage easement. Notwithstanding, vines and shade structures are proposed together with seating areas and public art, et cetera

	<i>view lines to lobbies to improve wayfinding</i>	View lines to lobbies improved with treatment of paving, public art and canopy structures to provide identity
	<i>include kerbs of street frontages</i>	Street frontages included
Level 1	<i>privacy concern, bathroom 1m from seating, reconfigure courtyards as POS for central units,</i>	Private courtyards provided to level 1, with further due consideration in relation to visual privacy and amenity
Level 6	<i>Outdoor dining - series of individual spaces</i>	additional individual spaces provided with shading and wind breaks
Landscape	<i>larger planters</i>	larger planters provided
	<i>remove artificial lawn</i>	artificial lawn removed
	<i>provide more shade</i>	more shading and wind breaks provided
	<i>anchor roof top trees</i>	trees to be anchored – noted
Amenity	<i>dimension bedrooms, kitchen depth, reconfigure adaptable unit, max 40 units per lift</i>	Two lifts service podium up to level 6; Tower lift services 37 units L7-L14
Safety	<i>light, passive active surveillance</i>	street lighting provided to improve passive and active surveillance
Aesthetics	<i>BCA, and structural drawings</i>	Initial structural coordination have been considered with Mark Wu of Adams Engineering , BCA provided
	<i>explain adhoc stylised pattern making</i>	The southern façade has been reviewed to provide division between the podium in the tower, thus reducing the overall bulk and improving articulation elements
	<i>blank southern walls warrant careful design</i>	Podium and Tower division, reduced bulk and scale through frames and articulation
	<i>southern façade - divide podium and tower further</i>	Brewster Murray - added to plans
	<i>add car, people, light pole, dog - happier</i>	Brewster Murray - added to plans
WLEP2009	<i>public domain - quality and function</i>	Brewster Murray - added to plans
	<i>verify overshadowing with same volume</i>	Brewster Murray - modelled adjoining properties volume and solar compliance
	<i>elevated ground level to MacCabe park - further work</i>	Brewster Murray - modelled and additional information provided along McCabe park
	<i>shadow diagrams to show extent to MacCabe Park, existing to proposed impacts compared</i>	Brewster Murray - noted, shadow diagrams have been extended to MacCabe Park
	<i>wind and reflectivity to be addressed</i>	Brewster Murray - wind breaks provided to plans
	<i>further renders of tower - less sketchy</i>	Brewster Murray - additional detail provided to plans

<p>Community Safety</p>	<p><i>Letterboxes are located inside the foyers, which is recommended. It is also recommended that each letterbox be individually keyed rather than master keyed, to reduce the opportunity for mail theft and fraud, even from other residents (or unit users).</i></p> <p><i>The garbage rooms should have restricted access to residents only, to reduce entrapment opportunities, especially as these rooms appear to be accessible by retailers and retail customers.</i></p> <p><i>What is the security treatment for resident car parking in the basement floor 1? It is noted that some resident parking is located alongside visitor parking.</i></p> <p><i>Each basement lighting should enable users to see inside parked vehicles.</i></p> <p><i>Ceilings and walls of car parks painted white will reflect and brighten existing lights, making the lighting more effective.</i></p>	<p>The letterboxes are located at the entry to the foyers, but not inside. This is preferred given the foyers will be restricted access for residents and visitors only, and Australia Post will require free access to these letterboxes. However, as recommended, each letterbox will be individually keyed to reduce the opportunity for mail theft and fraud. We believe this can be conditioned in any forthcoming DA consent accordingly.</p> <p>The garbage rooms will have restricted swipe card access only for residents, to ensure that retailers and retail customers cannot get access to these areas.</p> <p>The location of the resident secure roller door within Basement 1 has been adjusted, together with the arrangement for both commercial and visitor parking spaces throughout. All commercial and publicly accessible visitor spaces will be available now upon entry into the basement, with a roller door segmenting the residential parking area. This will ensure the public has no access to the residential basement car park area.</p> <p>Appropriate lighting to the Australian standards will be in place for both basement levels to ensure appropriate visibility of parked vehicles and in general throughout. Similarly, this can be conditioned in any forthcoming DA consent.</p> <p>This is agreed, and again can be imposed as a condition of any forthcoming DA consent.</p>
<p>Environment</p>	<p><i>The Detail Site Investigation report (DSI) prepared Douglas Partners consulting dated 18 July must be peer reviewed by:</i></p> <p><i>i. the Environment Institute of Australia and New Zealand's (EIANZ) Certified Environmental Practitioner (Site Contamination) scheme (CEnvP (SC)); or</i></p> <p><i>ii. the Soil Science Australia (SSA) Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) certification.</i></p> <p><i>An acoustic report must be prepared by a member of the Australian Acoustic Society (AAS) or the Association of Australian Acoustic Consultants (AAAC). If the author/reviewer of the report is not a member of AAS or AAAC, then the acoustic report must be peer reviewed by a member stated of those organisations.</i></p>	<p>We confirm that Douglas Partners hold these qualifications internally, and the report has been issued subject to an internal peer review accordingly. This is detailed within the revised report, attached to the application resubmission package for Council's consideration.</p> <p>We confirm that the acoustic assessment prepared by JHA has been undertaken by the appropriate qualified personnel. Attached is an updated report to the application resubmission package for Council consideration.</p>

	<i>A public submission noted that 267 Keira Street is approved and occupied as a residence above a shop. The acoustic report should be amended to reflect this residence.</i>	
Heritage	<p><i>Shadow diagrams showing impacts on MacCabe Park.</i></p> <p><i>Heritage Impact Statement that addresses the shadow impacts and Part 14 of Wollongong Development Control Plan 2009 Chapter E11 – Heritage Conservation, as well as archaeological issues listed below.</i></p> <p><i>c) Full archaeological assessment, including Statement of Heritage Impact and research design to support a section 140 Excavation permit.</i></p> <p><i>Heritage Interpretation Plan.</i></p>	<p>Refer to the updated solar impact analysis drawings prepared by Brewster Murray, which are attached to the application resubmission package. As shown, there is limited impact on McCabe Park throughout the day, with partial overshadowing identified only occurring from 3 PM onwards. These limited afternoon impacts are deemed acceptable, particularly as the proposed built form complies with Council's <i>WLEP 2009 Clause 8.3 Sun plane protection</i> controls (which is a direct measure of acceptability).</p> <p>Refer to the attached Historical Heritage Assessment and Statement of Heritage Impact prepared by Austral Archaeology. In summary, the development is in the vicinity of a war memorial and sandstone arch, and Canary Island date palms located in MacCabe Park. These items are both of local heritage significance and are listed under Schedule 5 of the Wollongong LEP. Austral Archaeology confirm that the development will not impact directly on these items and any potential impacts to these items from the development are likely to be minimal based upon the nature, configuration and location of these items.</p> <p>Austral Archaeology recommend that following the demolition of the existing building down to any concrete hardstand, archaeological investigations will be required in advance of construction. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing, and potentially salvage, programme overseen by the nominated Excavation Director.</p> <p>Section 9.3 of the attached Historical Heritage Assessment and Statement of Heritage Impact prepared by Austral Archaeology includes commentary and advice around potential interpretation strategy (if required).</p>

<p>Landscape</p>	<p><i>None of the submitted plans address the streetscape. The streetscape must be consistent with the City Centre Public Domain Technical Manual.</i></p> <p><i>The Deep Soil Zone (DSZ) does not have any trees within the 215m2. The planting indicated does not meet the objectives of a DSZ.</i></p> <p><i>The Communal Open Space (COS) on Level 1 represents 326m2, however, this area has no functional use as a COS – it is located on the southern side of the building and is too narrow.</i></p> <p><i>The COS on the Level 6 is better located, but there is a limited connection between the common room and the COS</i></p> <p><i>The Level 6 COS requires more sheltered spaces that provide protection from southerly and westerly winds, otherwise the area will be under-utilised as they will be too exposed to use.</i></p>	<p>Refer to the updated Architectural Plans by Brewster Murray and the revised Landscape Ground Floor Plan prepared by Site Image, which details streetscape upgrade considerations in accordance with the City Centre Public Domain Technical Manual.</p> <p>The subject site is located within a B3 Commercial Core location, which incorporates a shop top housing proposal with a commercial base. Deep soil zones are not required in this instance, as is consistent theme for City Centre environments such as this. The area within the drainage easement previously identified as deep soil zone is not appropriate given the flood conditions of the site and location of Council's stormwater assets. Thus, large trees and landscape plantings cannot be located in this part of the site and, as such, a responsive landscape design has been put in place as per the documentation prepared by Site Image.</p> <p>Notwithstanding this, a conscious effort has been made to embellish landscape planting opportunities upon the podium communal open space area, so as to soften and enhance this area as a green space for the enjoyment of future residents and visitors.</p> <p>As per Council's recommendations and the recommendations of the DRP, this level 1 COS area has been modified to incorporate small pockets of communal areas at either end now, with the internal portion of this podium segmented to be added to Units 107 and 108 as secondary POS areas. The appropriate changes are reflected in the updated Architectural Plans by Brewster Murray and the revised Landscape Level 1 Floor Plan prepared by Site Image.</p> <p>The design of Unit 604 at this podium level has been amended so as to increase the size and accessibility of the internal COS area, whilst at the same time improving its usability and interconnection/interface with the external COS area. It is considered this will enhance user friendly conditions for residents and their visitors. Refer to the updated Architectural Plans by Brewster Murray and the revised Landscape Level 6 Floor Plan prepared by Site Image.</p> <p>The Level 6 COS area has been modified to improve landscape design and planting throughout, but also increase opportunities for shaded areas and wind protection through the provision of awnings and glass balustrade windbreaks. Refer to the updated</p>
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	<p><i>The balcony planters on Level 5 appear to be very narrow, and will be unlikely to sustain gardens without adequate soil volumes</i></p> <p><i>The transition from the street frontages contains long ramps, it would be preferred that the ramps do not address the street.</i></p>	<p>Architectural Plans by Brewster Murray and the revised Landscape Level 6 Floor Plan prepared by Site Image.</p> <p>The width of the landscape planter beds are approximately 900 mm, which is considered appropriate soil volume to account for modest plant shrubs and accents.</p> <p>The ramping arrangements from street frontage have been amended to accommodate better access and a more user-friendly colonnade from one street to the other. These changes will also accentuate and express public accessibility from the drainage reserve lane area. Refer to the updated Architectural Plans by Brewster Murray and the revised Landscape Ground Floor Plan prepared by Site Image.</p>
Recreation	<p><i>Shadow diagrams are required showing potential overshadowing impacts on MacCabe Park throughout the year. MacCabe Park is located at Part Lot 12 DP 524803.</i></p>	<p>As above, refer to the updated solar impact analysis drawings prepared by Brewster Murray, which are attached to the application resubmission package. As shown, there is limited impact on McCabe Park throughout the day, with partial overshadowing identified only occurring from 3 PM onwards. These limited afternoon impacts are deemed acceptable, particularly as the proposed built form complies with Council's WLEP 2009 Clause 8.3 Sun plane protection controls (which is a direct measure of acceptability).</p>
Stormwater	<p><i>The existing/proposed manning's roughness for the drainage reserve and accessway don't reflect the existing or proposed materials. The manning's roughness must reflect the existing/proposed material and include fences within the overland flow path in the predevelopment scenario.</i></p> <p><i>The method of modelling the building undercroft (modified manning's roughness) does not accurately represent the proposed development with respect to its impact on flooding characteristics. The development proposes a ramp that meets the existing footpath level on the Kenny Street frontage which will not allow floodwater flows to directly enter the undercroft area and the proposed louvres will impact on the floodwater flows' ability to enter the undercroft area. The flood modelling for the proposed undercroft must be updated to accurately reflect the proposed development and appropriate blockage/structures included in the flood modelling.</i></p> <p><i>Details and calculations must be provided demonstrating that there is not net loss of floodplain storage in the 100 year and PMF events as a result of the development as per section 7 of Chapter E13.</i></p>	<p>In respect of the above-mentioned stormwater and floodplain management matters raised, the Civil Stormwater Concept Package and Flood Impact Assessment have been updated Adams engineers and BMT respectively. This documentation is attached to the resubmission application package for Council's consideration and considers those measures around existing/proposed manning's roughness values, flood modelling methodology, details and calculations of flood storage, as well as details on driveway crest level/basement entry.</p>

	<p><i>Details of the proposed driveway crest level must be provided to demonstrate that the basement entry level is above the highest adjacent 100 year flood level plus 200mm as per section 11.2.4 (2) of Chapter E14.</i></p>	
Traffic	<p><i>The applicant needs to provide a secure bicycle enclosure for residential and employee bicycle parking spaces. These facilities need to be provided as 'Class B' bicycle facilities with a self-closing door and combination lock. This facility needs to provide adequate manoeuvring space for users to move their bicycles in and out of the enclosure and lock their bicycles to the racks provided.</i></p> <p><i>The applicant must provide swept paths which show a B99 vehicle passing a B85 vehicle on all car parking aisles and critical corners. Clause 2.5.2 (c) of AS2890.1 provides the minimum requirements for safe and convenient movement of vehicles on circulation roadways and ramps within car parking areas. In particular it requires swept paths to be provided. Areas which it is necessary for two vehicles to pass one another shall be designed for a B85 vehicle to pass a B99 vehicle. In both cases areas shall be checked using single turn swept path templates for the B99 vehicle and the B85 vehicles which include the swept path clearances specified in Paragraph B3.1 and the swept path clearances specified in Paragraph B3.2. The swept path clearances shall clear any kerbs at the boundary of the intersection area.</i></p> <p><i>a. Note: A single B99 vehicle swept path should only be used where there is no requirement for 2 vehicles to pass.</i></p> <p><i>The applicant needs to ensure that the residential basement area remains secure whilst also allowing access for residential and commercial visitors. This could be done through the use of a roller door positioned to ensure that visitor parking is outside of the secure area. The applicant will need to show this detail on amended plans. The location of any security roller doors should not restrict manoeuvring to ensure that visitors can safely turn and exit the car park in a forward direction if all spaces are occupied.</i></p> <p><i>Accessible spaces R6 and R77 do not allow sufficient access width to/from the shared zone.</i></p>	<p>Refer to Basement Level Floor Plans prepared by Brewster Murray which indicate secure bicycle rack enclosures (Class B) as requested.</p> <p>Refer to the updated Traffic and Parking Assessment (with car park certification) prepared by Solution Traffic Engineers, which details swept paths as required.</p> <p>As aforementioned, the location of the resident secure roller door within Basement 1 has been adjusted, together with the arrangement for both commercial and visitor parking spaces throughout. All commercial and publicly accessible visitor spaces will be available now upon entry into the basement, with a roller door segmenting the residential parking area. This will ensure the public has no access to the residential basement car park area.</p> <p>Refer to Basement Level Floor Plans prepared by Brewster Murray which indicate all disabled car parking spaces now incorporate sufficient access widths for the corresponding shared zones.</p>

	<p><i>The applicant needs to provide further clarification regarding the proposed waste collection arrangements for the both the residential and commercial elements. The swept paths shown for the waste collection/service vehicle are for an 8.8 metre service vehicle which is smaller than the vehicles within Council's waste fleet. In the Waste Management Plan document an even smaller vehicle is shown. These sized vehicles are not used by Council's waste contractor.</i></p> <p><i>The size of Council waste collection vehicles can be found in Chapter E7 of the DCP (also shown below).</i></p> <p><i>If a non-standard sized waste vehicle is proposed to collect waste from within the site, the applicant will need to provide a letter of agreement from a recognised 'private' waste contractor acknowledging the internal constraints of the site and agreeing to the collection arrangements.</i></p>	<p>In regards to waste servicing arrangements, the maximum size vehicle capable of servicing the proposed development appears to be an 8.8 metre MRV, which has been accounted for with the appropriate swept Path movements as shown within the waste management plan prepared by solution traffic engineers (attached to the application). We understand this is not a Council standard vehicle size, so it is likely that subject development will be serviced by private contractor arrangements.</p> <p>The applicant has contacted with JJ Richards, Viola and Remondis, and all have verbally confirmed they have a vehicle that can service the subject development.</p>
Planning	<p><i>A full planning assessment will be undertaken when revised plans and supporting information is submitted.</i></p> <p>Public exhibition <i>Council's formal public exhibition period has ceased. Several submissions have been received and are available via the Government Information Public Access Act (GIPA) process. Application can be made via Council's website or customer service staff on 4227 7111.</i></p>	<p>Noted.</p> <p>We are aware of the public submissions made in respect to the proposed development, and consider that the updated documentation provided is responsive to those matters raised and the site's context.</p>

Table 4: Summary of Key Issues Raised in the Request for more information letter.

3.0 The Subject Site

3.1 Location and Context

The site is located at 264-268 Keira Street and 23 Kenny Street, Wollongong, directly opposite McCabe Park, in the southern precinct of Wollongong City Centre (eastern side of the rail corridor). The location is shown in *Figure 1* below.

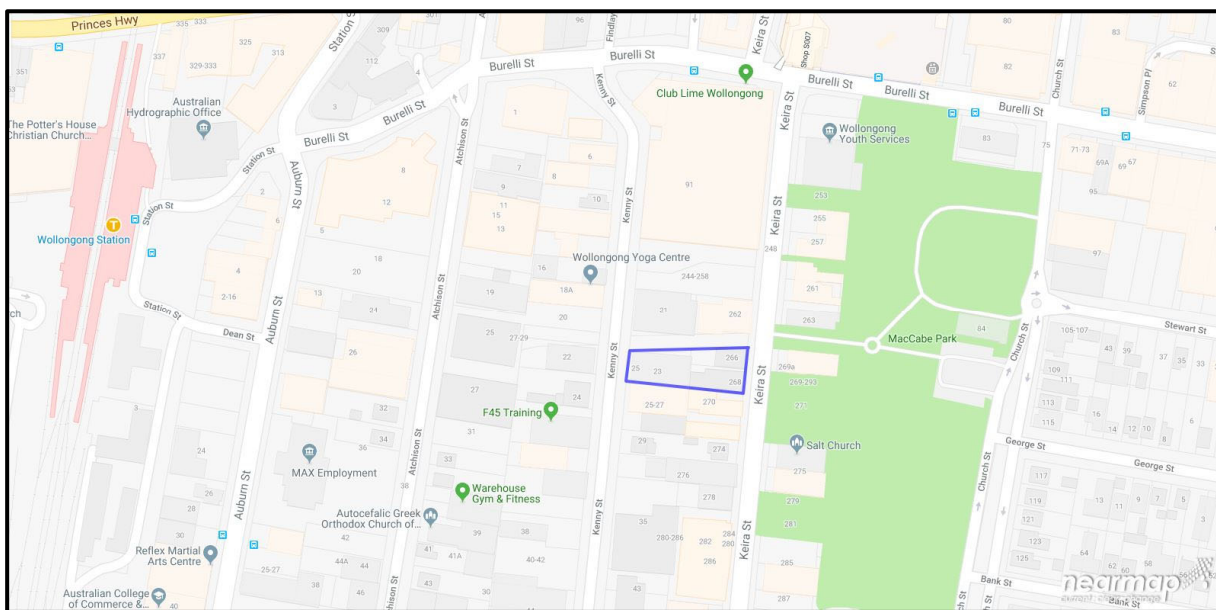


Figure 1: Location Plan (*Source: NearMap)

It is situated at the southern end of the Wollongong City Centre, approximately 150m south of the Keira and Kenny Street intersections with Burelli Street. As such, the property is well located in close proximity to a wide range of shops, services, employment and facilities, including recreation and community infrastructure (i.e. parks, schools, hospitals, TAFE and university etc).

The land is strategically located in an accessible location, with public transport (i.e. both bus and train services) located at the doorstep to the site. The site is situated within the Wollongong City Council Local Government Area (LGA), approximately 80km south of Sydney.

3.2 Site Description

The site comprises of four (4) individual allotments (legally referred to as Lot 101 DP 709651, Lot 1 DP 800021, Lot 4 DP 522288, and Lot 100 DP 1130021) which will be amalgamated to form the development parcel.

The land is irregular in shape, with a total area of 2586m². It has a 38.6m width/frontage to Keira Street to the east, and 28.84m width/frontage to Kenny Street to the west, and a minimum depth of 75.6m along the southern boundary, which increases to 77.2m along the northern boundary.

An aerial view of the subject site is shown in *Figure 2*.



Figure 2: Aerial View of the Site and Locality (*Source: NearMap)

The site is not a heritage item but is located adjacent to McCabe Park, which is listed in *Schedule 5* of the *WLEP 2009*. The mitigation of any solar impact on the heritage item is ensured through compliance with *Clause 8.3* of *WLEP 2009*. Council records indicate the site may contain potential European Archaeological artefacts relating to the historical drainage easement. As such, a Historical Heritage Assessment & Statement of Heritage Impact has been prepared by Austral Archaeology and is attached to this application.

The site is identified as being affected by flood (Medium and High Flood Risk Precinct) having a significant bearing on the project requiring “no encroachment into the High Flood Risk Precinct area, no reduction in conveyance capacity of the site, and no increase in flooding elsewhere, as a result of the development. The overland flow path through the site will need to be maintained.” (Pre-lodgement notes – PL-2018/235). An independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd and is attached to this application.

A survey plan of the site is provided in *Figure 3* below and forms part of the suite of DA documentation attached to this application.

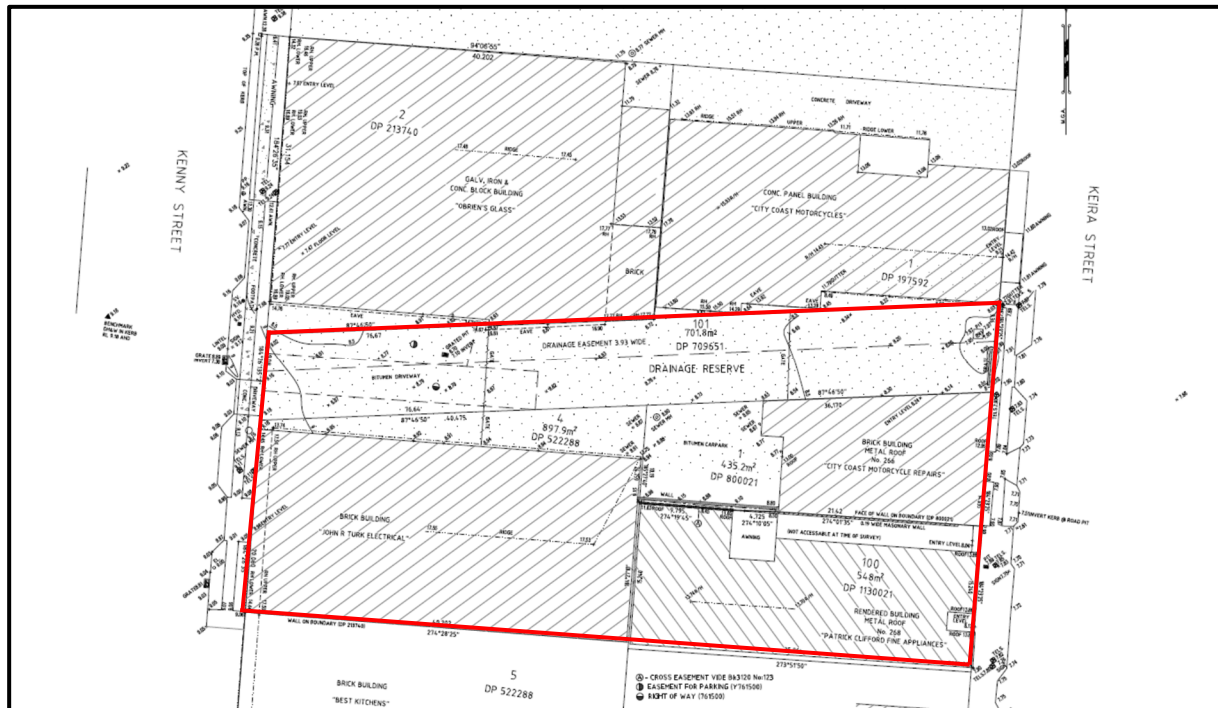


Figure 3: Site Survey (*Source: C.Robson & Assoc)

3.3 Existing Development

At present, the sites contain single storey brick buildings with metal roofs with frontage to Keira and Kenny Streets, currently occupied by an Electrics store, Appliance store and Motorcycle repair shop with an at-grade bitumen carpark to the rear.

Photographs of the existing developments described above, are shown in Plate 1 - 3.



Plate 1: View of Existing Commercial Buildings Situated on the Site at 264-268 Keira Street, Wollongong (*Source: MMJ Planning)



Plate 2 : View of Existing Commercial Buildings Situated on the Site at 23 Kenny Street, Wollongong (*Source: MMJ Planning)



Plate 3 : View of Existing Commercial Buildings Situated on the Site at 23 Kenny Street, Wollongong (*Source: MMJ Planning)

Vehicular access is available from both Keira and Kenny Streets and with access to the carpark from Keira Street.

There are no existing trees or vegetation situated on site that will be affected by the proposal, nor street trees/shrubs located in the public domain fronting either Keira or Kenny Streets.

3.4 Surrounding Development

The site is located within an existing commercially orientated area that contains a mix of uses, including business, office, retail and light industrial uses, and high density residential development.

Surrounding development immediately adjoining the site is detailed as follows:-

To the north: Two (2) x single storey buildings occupied by a commercial uses (i.e. City Coast Motorcycles and O'Briens Glass) fronting Keira and Kenny Streets. Further north lies a small bitumen carpark leading to a five (5) storey parking complex.

To the south: Two (2) x single storey buildings occupied by a commercial uses (i.e. Top Tiles timber and floors and Best Kitchens) fronting Keira and Kenny Streets. Further south lies a six (6) storey mixed use development.

To the east: McCabe Park (Heritage Item) is situated directly opposite the site, with three (3) small single storey buildings used for community and commercial purposes fronting Keira Street.

To the west: Two (2) x single storey buildings occupied by a commercial uses (i.e. Yoga Centre and Uniforms) fronting Kenny Street.

Photographs of development surrounding the site are shown in *Plates 4 to 11* below.



Plate 4: View of Adjoining Development to the North at 262 Keira Street Wollongong (*Source: MMJ Planning)



Plate 5: View of Adjoining Development to the South at 270 Keira Street Wollongong (*Source: MMJ Planning)



Plate 6: View of Keira Street looking North (*Source: MMJ Planning)



Plate 7: View of Keira Street looking South (*Source: MMJ Planning)



Plate 8: View of Adjoining Development to the south of Subject Site at 25 Kenny Street (*Source: MMJ Planning)



Plate 9: View of Adjoining Development to the North of Subject Site at 21 Kenny Street, Wollongong (*Source: MMJ Planning)



Plate 10: View of Kenny Street looking North (*Source: MMJ Planning)



Plate 11: View of Kenny Street looking South (*Source: MMJ Planning)

4.0 Development Proposal

4.1 Development Description

The proposed development involves demolition of existing structures and construction of a new multi-level mixed use development at 264-268 Keira Street and 23 Kenny Street, Wollongong (the site).

The site comprises of four (4) individual allotments (legally referred to as Lot 101 DP 709651, Lot 1 DP 800021, Lot 4 DP 522288, and Lot 100 DP 1130021) which will be amalgamated to form the development parcel. It is located directly opposite McCabe Park, on the eastern side of the rail corridor.

The DA seeks consent to undertake the following works:

- Demolition of all existing buildings/structures;
- Construction of a new fifteen (15) storey mixed use commercial/residential development, consisting of two (2) levels of basement parking, ground floor commercial/retail premises, with residential apartments above (i.e. shop top housing);
- Residential component comprises five (5) levels of podium residential units with a setback residential tower above, to provide 107 residential apartments in total;
- Dwelling mix includes thirty-six (36) x one (1) bedroom, fifty-six (56) x two (2) bedroom apartments, twelve (12) x three (3) bedroom apartments and three (3) x four (4) bedroom apartments;
- Podium level(s) communal open space and garden areas; and
- Basement parking over two (2) levels for a total of 140 cars, with additional bike (48 spaces) and motorbike (8 spaces) parking.

Pedestrian access to the residential units is available from both Keira and Kenny Street frontages via two (2) lobbies. Vehicular access to the development is provided via a driveway off Keira Street, located adjacent to the southern boundary of the site.

The proposal is detailed in the architectural drawings prepared by Brewster Murray (as shown below and attached to the application) and described in the following sections of this SEE.

The DA does not involve strata subdivision and/or signage.

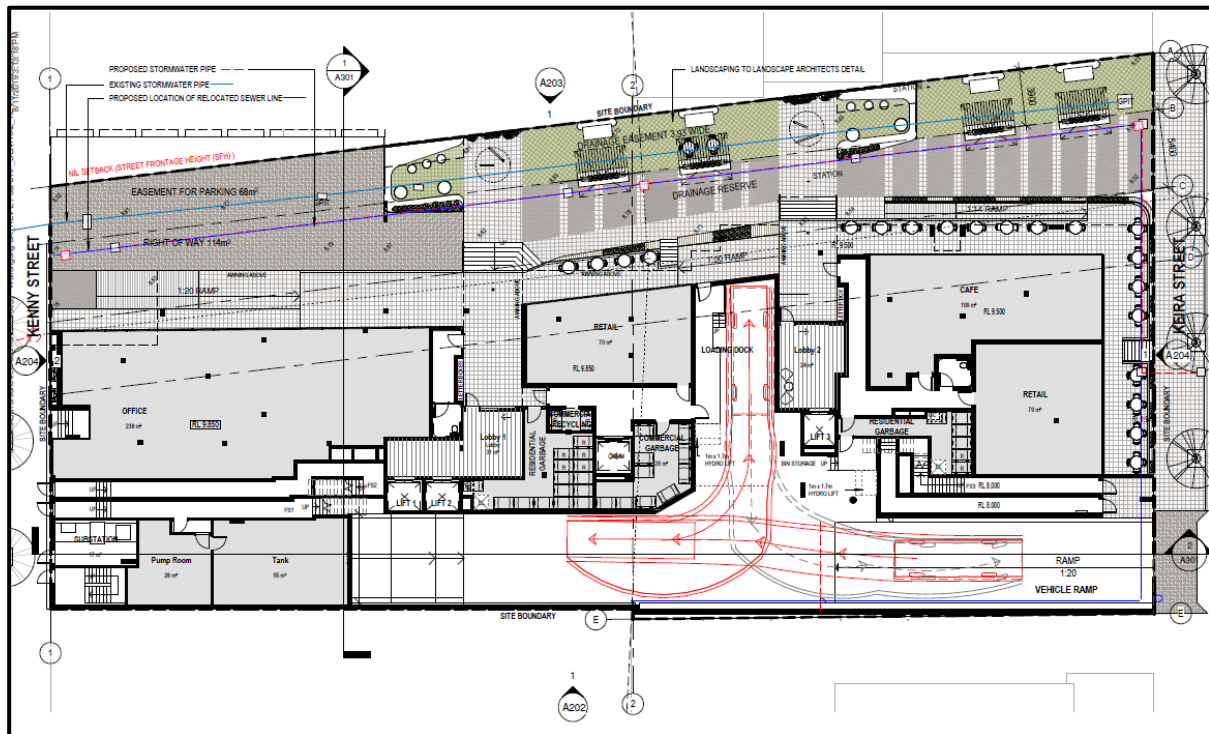


Figure 4: Proposed Site and Ground Floor Plan (*Source: Brewster Murray)

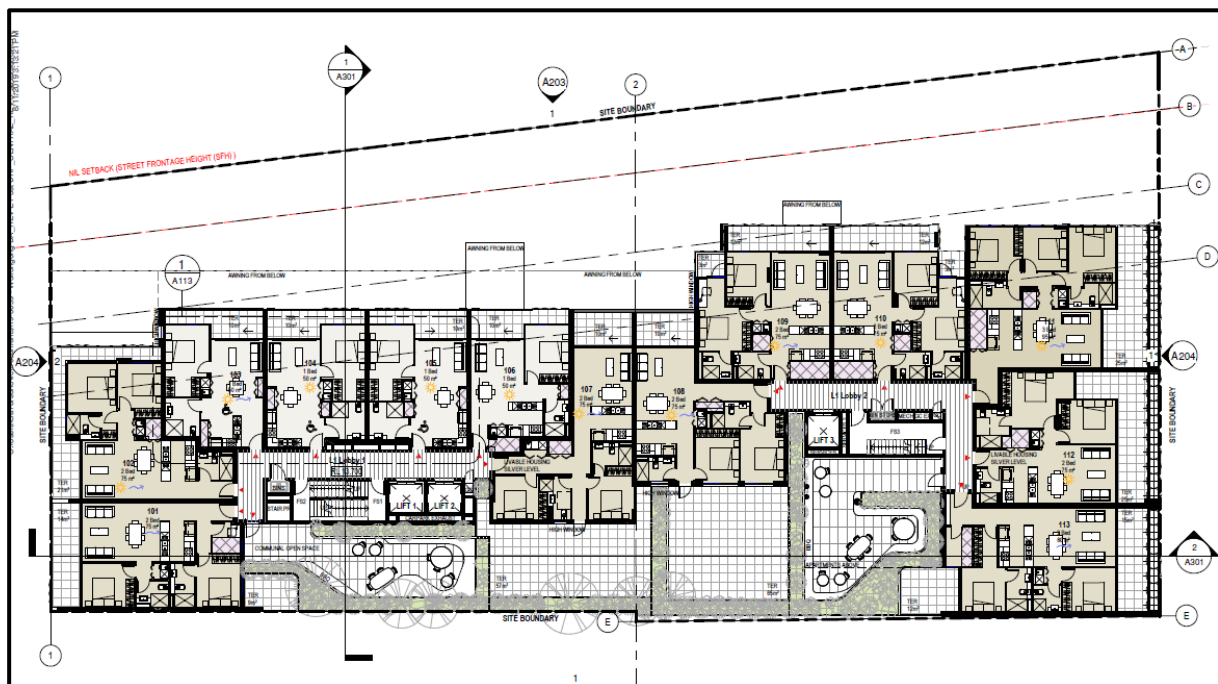


Figure 5: Proposed First Floor Plan (*Source: Brewster Murray)

A 3D perspective of the proposed development have also been provided (refer attached) and are shown in *Figure 6*.



Figure 6: 3D perspective (*Source: Brewster Murray)

4.3 Numerical Statistics

The key numerical statistics relevant to the proposal are summarised in Table 4 below.

Component	Proposal
Site Area	2586m ²
Gross Floor Area	9215m ² total - 8610 m ² residential - 606m ² commercial
Floor Space Ratio	Permitted: 3.66:1 Provided: 3.65:1
Building Height	15 storeys 48m above ground level 56.75m RL to AHD
Dwelling Mix	thirty-six (36) x one (1) bedroom (34%) fifty-six (56) x two (2) bedroom (52%) twelve (12) x three (3) bedroom (11%) three (3) x four (4) bedroom (3%)
Dwelling Sizes	Range from 50m ² – 174m ² to reflect market demand

Adaptable Dwelling	11 x adaptable units (i.e. Units 103, 104, 105, 204, 205, 304, 305, 404, 405, 504, 505)
Floor to Ceiling Heights	Basement 2.7m Ground level 3.7m and 3.35m Residential Levels above 2.8m
Communal and Public Open Space Areas	Required: 646.5m ² 25% of site Provided: 777m ² on Level 1 and Level 6
Landscaped Area	559m ²
Deep Soil Area	Required: 7% of site (181m ²) Provided: 7% of site (183m ²)
Car Parking	140 Spaces 110 Residential 8 Commercial 22 Visitors 48 Bicycles 8 Motorcycles
Storage	Individual storage area allocated to each unit (with sizes nominated on plan)

Table 5: Key Numerical Statistics

4.4 Development/Urban Design Principles

The planning and design principles adopted for the proposed development of the site have been prepared by the project Architects Brewster Murray, and are stated as follows:

Principle 1: Context and Neighbourhood Character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions.

Responding to context involves identifying the desirable elements of an area's existing or future character. Well-designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

The site consists of four existing lots, including the Drainage Reserve at 264 Keira Street. The site is located to the south of the existing commercial and business core of the Wollongong City Centre.

The site lies mid block in the street block bounded by Burelli St, Keira St, Ellen St and Kenny St. The site



lies on an east-west axis with frontage to Keira St to the west and lies opposite existing elements of MacCabe Park and sites zoned for future inclusion in that open space. The site has a gentle fall to the east of approximately 1.1 metres.

The general locality and built form is in a state of transition with older style, low scale mixed commercial/industrial buildings being replaced with significant mixed commercial and residential development consistent with the general strategic thrust for redevelopment within the B3 zone.

A commercial edge to the Keira Street and Kenny Street frontages and pedestrian link through the street block along the drainage reserve on the northern boundary of the site, aligns with the current location of designated pedestrian pathway links within MacCabe Park.

The design approach is to work with its parameters and circumstances to turn the constraints to opportunities creating a desirable outcome and a positive visual contribution to the existing and future character of the precinct.

The location of the site mid block provides the opportunity for a greater connectivity for pedestrians to MacCabe Park.

At a master planning level, the future character of the site envisaged as a more urbane and dense context due to the proposed higher FSR and height in the neighbouring blocks as opposed to the current FSR & height.

The design aspires to be in keeping with its future context as well as being sympathetic to its immediate and current context being a mixture of single and double storey commercial and residential dwellings.

The layout and planning are a direct response to the site orientation:

The apartments aspects being used for primary living spaces are orientated north to maximise the main solar collector and main outlook for the development.

The layouts demonstrate grouping of the services and circulation space and secondary living areas on majority of north-eastern façade and is treated architecturally with windows of smaller proportion to gain advantage of the solar access.

The development responds to the streetscape, presenting an appropriately scaled built form and setback, which relates to existing neighbouring properties and provides a suitable relationship to the existing and the likely future development of the locality.

The proposed development is responsive to the opportunities and constraints provided by the existing

context including-

- Responding to the proposed future scale and a breakdown of elements and form to reflect the existing and proposed rhythm of the streetscape.
- The proposed development is positioned to capture as much solar penetration with the majority of living spaces and private open spaces facing northerly aspect.
- The development is located 500m walk from Wollongong Station and is well placed to utilise existing community and transportation services.

Principle 2: Built Form and Scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings.

Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The proposed development complies with the permissible building height controls of 24m and 48 m and footprint identified in the Wollongong Development Control Plan.

The ground floor commercial units are orientated to the Keira Street, Kenny Street and the pedestrian link through the northern boundary of the site. The active frontages consist of a mix of spaces including office, café and retail spaces. They are designed to create an active frontage through the use of activation of ground floor by way of pedestrian and habitable spaces forming the base to the building to relate to the streetscape and scale of the street.

The upper floors to the street frontage have been broken down into smaller proportions and articulated with façade forms to match the public domain and future scale of the surrounding mixed use neighbouring blocks.

Mitigation of overall bulk, scale and height is achieved through articulation in the form of vertical and horizontal design elements, proportional box frames, sub-components and entrance establishes architectural proportions, rhythm and scale appropriate to the past and future desired residential character of the local area.

The built form is expressed by a two podiums and tower with articulated and active elements helping break down the overall bulk of the building.



The frontage along Keira Street and Kenny Street have been articulated to address the street frontage. The upper levels have been proportionately designed to incorporate wrapping balconies to create a cohesive design of the whole building.

The façade has been conceived with the intentions of acknowledging and incorporating the surrounding and neighbouring built form, as well as the future character of the precinct, from warehouses to residential flat buildings and mix use developments.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context.

Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

The proposed density is in keeping with the projected population growth, with the proposal seeking to maximise the FSR to allow for varying unit typologies.

The subject site is located within walking distance of available community, commercial, recreational and transportation infrastructure.

The proposal comprises of a mix of large office space, café and retail spaces at ground level with an active pedestrian link through the site. 108 Residential apartments comprising 36 one-bedroom apartments, 56 two-bedroom apartments, 12 three-bedroom apartments and 3 four-bedroom apartments all complying with the accommodation size.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials, and deep soil zones for groundwater recharge and vegetation.

Rainwater storage tanks are provided on ground level maximising rainwater conservation, harvesting and storage for re-use in landscape irrigation, water recycling and car washing.

Energy efficient design principles are incorporated throughout the design. Residential floor layouts are



arranged such that living areas and private open spaces are orientated to increase cross ventilation in the summer and solar penetration during the cooler months with balconies accessible from the principle living area of each apartment.

Environmentally sustainable measures incorporated in the development include:

- Building orientates north or northerly aspect to maximise solar gain. 96 apartments represent 89% of total proposed apartments receive 2 or more hour's sunlight to their living spaces.
- Design solution provides effective benefices to cross flow ventilation to most apartments by generating natural cross ventilation through dual aspects and corner orientation of apartments. 77 apartments represent 71% of total proposed apartments are naturally ventilated.
- Maximised planting on terraces
- Ethically source long lifecycle products and materials
- Dual flush toilets;
- Rainwater to be used for garden irrigation
- Taps fitted with water efficient fittings;
- Insulation and sisalation under roof.
- Proposed visitor and residential bicycle parking in compliance with Wollongong Council's Development Control Plan

Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values, and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity, provides for practical establishment and long term management.

The landscape design is an extension of the design concept. The intent is to create entries, courtyards, pedestrian through site link and open spaces designed with vegetation for enjoyment of the public, residents, visitors and guests on level 1 and level 6.

The landscape design proposes deep soil landscape zone along the northern perimeter of the boundary, providing a vegetation buffer at boundary and attractive street frontage. A level 1 and podium rooftop level communal garden are provided with an artistic garden form creating a pleasant common outdoor



living space for the residents.

The landscape addresses the following design objectives:

- Enhance the amenity and appearance; create a range of spatial environments, private courtyards, gardens and screening.
- Create visual experiences in the landscape settings, avoid directly looking onto neighbouring buildings
- Incorporate water sensitive urban design principles and environmentally sensitive design to create a low maintenance, environmentally sensitive landscape that has an array of deep planted trees along with diverse shrub and groundcover.
- Create a quality and energised outdoor space at ground level and rooftop level garden which will be well used by residents and visitors alike.
- Integrate architecture and landscape throughout to create soft building edge design.

Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident wellbeing.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, and ease of access for all age groups and degrees of mobility.

Well organised, functional apartment layouts and spatial configurations ensure high standards of residential amenity maximising room sizes, solar access, and natural ventilation.

Architecturally integrated environmentally responsive balconies are incorporated in the layout of all apartments, with the majority facing northerly aspect.

A diversity of dwelling sizes caters to differing housing choice a mix of individual and household types are accommodated within to suit the demand of local market. The proposed unit sizes (min. 55sqm for 1 bed, 75-82sqm for 2 bed +study, 95sqm for 3 bed and 107-175sqm for 4 bed) to comply with the minimum area requirement by the Apartment Design Guide.

When completed the proposed development will substantially enhance and enliven the amenity of the locality through provision of highest quality commercial and residential accommodation and urban and design response.

Principle 7: Safety



Good design optimises safety and security, within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Through creation of clearly defined activated public and private domains, safety and security is promoted with natural surveillance encouraged at the street frontages and pedestrian link.

Generally living spaces and private outdoor spaces are orientated towards the street and public pedestrian link ensuring casual surveillance and overlooking with improved security for residents and the local community.

Access to residential area will be controlled by access card.

Open spaces are either private open spaces or communal spaces that can be accessed only by residents, only being accessible during daylight hours and controlled with gates and fences.

Garden gates and fencing are integrated with the landscape design to provide safety and security while achieving a good standard visual presentation.

Principle 8: Housing Diversity and Social Interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets.

Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people, providing opportunities for social interaction amongst residents.

The development provides a variety of dwelling sizes and types including 1, 2, 3 and 4 bedroom apartments catering to the differing needs and affordability of the local community.

Common gardens are accessible by all residents for social interaction activities and leisure living. Large meeting spaces are provided to ensure flexibility and encourage social interaction amongst residents. Provisional apartments and parking spaces for people with disabilities are provided in accordance with

the Wollongong Council's DCP parking codes.

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

The proposal has made use of quality materials and colours appropriate to the context and surrounding area.

The building facade to Keira Street and Kenny Street emphasise and accentuate parts of the building façade through the use of a similar language to achieve a cohesive building outcome and understand the theory and principles behind the design. Changes in colour and façade materials help to articulate the podium and addresses street frontage with appropriate proportions.

The theory and principles to the aesthetics of the building design have arrived from a multiple of stimulants and ideas culminating in a focussed and narrowed theory gathered from the development of the building and the surrounding context. The breakdown of a base, middle and top helps to create an aesthetic which will sit comfortably in its surrounding scale and context as well responds to the expected future character of the precinct.

Developing the constraints and opportunities of the site has allowed the building to move and transform from the active to a sense of the building's simplicity and nature. The language of the building's facades has been carried through responding to the site forces orientation and constrains posed by the site. The use of materials and colours has also been carried through to help express this language.

Consideration has been made to the southern façade where walls are articulated with texture and pattern to mitigate any blank walls.

Selected quality, modern, durable and environmentally sustainable external finishes ensures the proposed development enhances the amenity of the local area. Carefully selected colours sympathetic to the visual composition of neighbouring developments maintains and responds appropriately to the current and desired future character of the precinct. The materials selected such as concrete panels and paint in various shades, metal screens, several of types of glazing, textured feature walls have provided the building with a high quality, low maintenance external façade that contributes positively to the visual presentation of the development.

4.3 Demolition/Site Preparation/Remediation

Site preparation works include:

- Demolition of all existing buildings and structures;
- Removal of the existing bitumen carpark;
- Excavation of approximately 7m below existing ground level; and
- Remediation to ensure the land is suitable for the proposed uses

Relevant documentation in relation to the above is detailed within the Demolition Plan, the Geotechnical Assessment prepared by Alliance Geotechnical Pty Ltd, and the Detailed Site Investigation Report (DSI) prepared by Douglas Partners Pty Ltd.

4.4 Heritage

The site is not a heritage item but is located adjacent to McCabe Park, which is listed in *Schedule 5* of the *WLEP 2009*. The mitigation of any solar impact on the heritage item is ensured through compliance with *Clause 8.3* of *WLEP 2009*. Council records indicate the site may contain potential European Archaeological artefacts relating to the historical drainage easement. As such, a Historical Heritage Assessment & Statement of Heritage Impact has been prepared by Austral Archaeology and concludes and recommends:

The development is in the vicinity of a war memorial and sandstone arch, and Canary Island date palms located in MacCabe Park. These items are both of local heritage significance and are listed under Schedule 5 of the Wollongong LEP. The development will not impact directly on these items and any potential impacts to these items from the development are likely to be minimal based upon the nature, configuration and location of these items.

The significance of the Canary Island date palms relates to their importance as a collection of notable, aged examples which represent earlier attempts to beautify the city by Council. This significance is confined to the park itself and does not extend to include any adjacent properties. The war memorial and arch are significant landscape elements in Wollongong and serve an important role in ANZAC commemoration activities undertaken across the city. However, the memorials are located within a grove of trees which visually and physically separate it from the surrounding parkland.

The development will have a minimal impact on the heritage significance of either item. The proliferation of modern developments within the locality have already had impacts on the heritage



value of the area. The only quantifiable impact to the date palms is on the west facing view from the palms looking towards Keira Street, where a few outlying palms are located. However, this view already consists of unaesthetic factory buildings.

While the study area has been identified as containing potential archaeological relics, these are to be handled through the implementation of an archaeological testing and, if required, salvage program.

The development is **acceptable** from a heritage standpoint.

In order to mitigate against the harm documented in this assessment, it is recommended that:

- 1) Given that parts of the study area have been assessed as having archaeological potential, and relics of local significance are likely to be impacted during the proposed construction works, an excavation permit is required under the NSW Heritage Act 1977. The proponent should apply for a Section 140 Excavation Permit. A suitably accredited archaeologist who is approved by the heritage team of the DPC to oversee the excavation of sites of local significance will need to be nominated as Excavation Director.
- 2) Following demolition of the existing building down to any concrete hardstand, archaeological investigations will be required in advance of construction. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing, and potentially salvage, programme overseen by the nominated Excavation Director.
- 3) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and the Heritage Division be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist is to be contacted to assess the situation and consult with the heritage team of the DPC regarding the most appropriate course of action.
- 4) In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Aboriginal heritage team of the DPIE and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the National Parks & Wildlife Act 1974 requires that the DPIE must be notified of any Aboriginal objects discovered within a reasonable time.
- 5) Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 7 and the installation of any

subsurface services.

- 6) *A copy of this assessment should be lodged by the proponent in the local history section of the local library, and in the library maintained by the heritage team of DPC.*

4.5 Tree Removal

There are no existing trees or vegetation situated on site that will be affected by the proposal, nor street trees/shrubs located in the public domain fronting either Keira or Kenny Streets. An Arborist Report is not required to support the DA.

4.6 Landscaping and Open Space

A Landscape Plan has been prepared by Site Image (Landscape Architects) with appropriate planting within the development, with extensive planting to the Ground floor, Level 1 and Podium Level 6 and smaller planter boxes to Keira Street on Level 5. The landscape design contributes to the streetscape of the public domain and softens the built form. The common open space areas provided are both functional and accessible.

4.7 Stormwater & Flooding

The site is identified as being affected by flood (Medium and High Flood Risk Precinct) having a significant bearing on the project requiring “no encroachment into the High Flood Risk Precinct area, no reduction in conveyance capacity of the site, and no increase in flooding elsewhere, as a result of the development. The overland flow path through the site will need to be maintained.” (Pre-lodgement notes – PL-2018/235). An independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd (attached to this application) in accordance with Chapters E13 and E14 of the WDCP 2009.

The flood impact assessment addresses the issue of flood risk and satisfy the consent authority that the matters outlined in Subclause 3 have been addressed. Namely, that:

“The results show that the proposed development site is affected by overland flow, with maximum depths of approximately 350 mm during the 1% AEP. In the proposed development scenario, the maximum peak flood depth is 340mm. For both the existing and proposed scenario the average peak flood depths is 160mm across the site and drainage easement.

Modelling indicates the proposed development results in no tangible increase in peak flood level for events up to and including the 1% AEP. Flood storage within the site and the drainage easement increase by 16 m³ during the 1% AEP.”



The Stormwater has been designed to take into account the flooding and easement information and has been prepared by Adams Engineering to address Council's requirements. This information is attached in response to Council's DCP requirements, as appropriate.

4.8 Parking and Vehicular Access

4.8.1 Basement Access

Vehicular access to two (2) basement levels will be gained via a driveway off Keira Street on the southern side of the building, providing safe and convenient ingress/egress for both residents and visitors.

4.8.2 Car Parking

A total of 140 car parking spaces will be provided within the basement carpark over two (2) levels, including 110 resident parking spaces, twenty-one (22) visitor parking spaces and eight (8) commercial parking spaces.

4.8.3 Bicycle and Motorbike Parking

The development provides forty-eight (48) bicycle parking spaces and eight (8) motorbike parking spaces.

4.9 Waste Management

The waste storage areas are nominated on plan at ground level for both the commercial and residential tenancies. Bins will be enclosed so that they will not be visible from the street. The site grades are relatively level to allow for convenient transfer and collection, as appropriate. As required, a Waste Management Plan (WMP) has been prepared by Solution 1 Traffic Engineers, and is attached to the application for Council's consideration.

4.10 Accessibility

Eleven adaptable units are required by Wollongong Development Control Plan 2009. The units designated as adaptable are Unit numbers 103, 104, 105, 204, 205, 304, 305, 404, 405, 504 & 505 and will meet the requirements of AS4299 for Adaptable Housing Class C.

In addition to the eleven (11) adaptable housing units provided, Compliance assessment with Objective 4Q1 that requires 20% of the units to incorporate the features of the Livable Housing Guidelines Silver



level. In addition to the adaptable units provided the following 10 units 107, 112, 207, 212, 307, 312, 407, 412, 507 & 512 are capable of providing compliance with the features of Silver level of Livable Housing Guidelines

A Statement of Compliance/Access Report has been prepared by Accessible Building Solutions to address Access for People with a Disability. The report addresses the requirements of the BCA, relevant Australian Standards, SEPP 65 and Council's DCP provisions.

4.11 Services and Infrastructure

The site is situated within an existing urban area and as such, the development will be connected to the existing public utility infrastructure provided (ie. power, water, sewer, gas, telecommunications and the like), which is understood to have sufficient capacity to accommodate the needs of the proposal (subject to appropriate augmentation works). In this regard, an electrical substation has been allowed for in the design by Brewster Murray, incorporating an accessible area adjacent to the Kenny Street frontage.

4.12 Energy Efficiency

The proposed development has been designed to achieve compliance with BASIX and the appropriate BASIX certification by Certified Energy has been attached to demonstrate compliance in this regard.

Water sensitive urban design (WSUD) has also been considered in accordance with Chapters E15 of the WDCP 2009 and the associated Catchment Plan prepared by Adams Consulting Engineers is attached to the application for Council's consideration.

4.13 External Materials and Finishes

The development will have a modern appearance. The external materials and finishes are detailed on the architectural drawings and will comprise a combination of concrete feature panels, metal screens and glazing (refer to the materials and colours schedule prepared by Brewster Murray).

4.14 Noise

The site is located within the continuous traffic flow along Keira and Kenny Streets and is affected by regular train movements on the South Coast Rail Line in the distance. As such, an Acoustic report was undertaken by JHA Services to address noise and vibration and is attached to this application.



4.15 Cost of Works

The cost of works for the purpose of determining the DA fee for the proposed development has been calculated in accordance with *Clause 255(1)* of the *EPAR 2000* and is \$32,080,975. excluding GST. The cost of works is detailed in the Quantity Surveyors Cost Estimate prepared by Construction Consultants and is attached to this application.

5.0 Environmental Planning Framework

This section outlines the environmental planning framework, as relevant to the proposal.

5.1 Act

- *Environmental Planning and Assessment Act 1979 (EPAA 1979);*
- *NSW Heritage Act 1977 (Heritage Act)*

5.2 Regulations

- *Environmental Planning and Assessment Regulation 2000 (EPAR 2000);*

5.3 State Environmental Planning Policies

- *State Environmental Planning Policy (State and Regional Development) 2011 (SRDSEPP 2011);*
- *State Environmental Planning Policy (Infrastructure) 2007 (ISEPP 2007);*
- *State Environmental Planning Policy No 55 - Remediation of Land (SEPP 55);*
- *State Environmental Planning Policy (Coastal Management) 2018 (CMSEPP 2018);*
- *State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (BASIX SEPP 2004); and*
- *State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development (SEPP 65);*

5.4 Local Environmental Plans

- *Wollongong Local Environmental Plan 2009 (WLEP 2009);*

5.5 Development Control Plans

- *Wollongong Development Control Plan 2009 (WDCP 2009);*

5.6 Strategic Plans

- *Illawarra-Shoalhaven Regional Plan; and*
- *Wollongong City Centre Access and Movement Strategy 2005;*



5.7 Contribution Plan

- *Wollongong City-Wide Development Contributions Plan (2018)*

5.8 Planning Agreements

- *There are no applicable planning agreements*

6.0 Environmental Assessment

6.1 Section 4.15 Evaluation

This section considers the relevant matters for consideration in accordance with the provisions of Section 4.15(1) of the EPAA 1979, which are detailed as follows:

“(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Planning Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),

(v) (Repealed)

that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest.”

The relevant matters for consideration applicable to the proposed development are addressed in detail below.

6.2 Environmental Planning and Assessment Act 1979

The objectives of the EPAA 1979 outlined in Section 1.3 read as follows:

“(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State’s natural and other resources,
(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,
(c) to promote the orderly and economic use and development of land,
(d) to promote the delivery and maintenance of affordable housing,
(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,
(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),
(g) to promote good design and amenity of the built environment,
(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,
(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,
(j) to provide increased opportunity for community participation in environmental planning and assessment.”

The proposed development satisfies the above objectives for the reasons set out below.

- It allows for the orderly and economic use of the land;
- Creates employment opportunities during both construction and operation;
- Delivers affordable housing to meet the needs of the local community;
- Provides high quality urban design and amenity; and
- There will be no unreasonable adverse impacts on the environment.

6.3 Environmental Planning and Assessment Regulation 2000

All relevant information to be included in the DA has been provided in accordance with Schedule 1 of the EPAR 2000. Furthermore, all building work will be carried out in accordance with Clause 98 of the EPAR 2000, which requires the consent authority to consider the provisions of the Building Code of Australia (BCA).

6.4 NSW Heritage Act 1977

The Heritage Council is the approval authority under the Heritage Act for works to an item on the State Heritage Register (SHR). Section 57(1) of the Heritage Act identifies the need for Heritage Council approval if the work involves the following tasks:

- *demolishing the building or work;*
- *damaging or despoiling the place, precinct or land, or any part of the place, precinct or land;*
- *moving, damaging or destroying the relic or moveable object;*
- *excavating any land for the purpose of exposing or moving the relic;*
- *carrying out any development in relation to the land on which the building, work or relic is situated, the land that comprises the place, or land within the precinct;*
- *altering the building, work, relic or moveable object;*
- *displaying any notice or advertisement on the place, building, work, relic, moveable object or land, or in the precinct; and*
- *damaging or destroy any tree or other vegetation on or remove any tree or other vegetation from the place, precinct or land.*

Demolition of an SHR item (in whole) is prohibited under the Heritage Act, unless the item constitutes a danger to its occupants or the public. A component of an SHR item may only be demolished if it does not contribute to the significance of the item.

Section 57(1) of the Heritage Act also applies to archaeological remains (such as relics) within an SHR site, and excavation can only proceed subject to approval of a Section 60 application by the Heritage team of the Department of Premier and Cabinet (DPC).

No part of the study area appears on the SHR.

Excavation Permits

Archaeological remains on sites not listed on the SHR are addressed under Section 139 of the Heritage Act, which states that “a person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit”.

Relics are defined by the Heritage Act to be:

“any deposit, artefact, object or material evidence that:

- (a) relates to the settlement of the area that comprises NSW, not being Aboriginal settlement, and*
- (b) is of State or local heritage significance.”*



An excavation permit is also required if a relic has been discovered in the course of excavation without a permit (Section 139(2) of the Heritage Act). Section 139 of the Heritage Act applies to all relics which are not listed on the SHR or protected by an Interim Heritage Order (IHO). Relics protected by an SHR listing or an IHO are subject to approval required by Section 57(1) of the Heritage Act and require a Section 60 Application.

If an excavation permit is required by Section 139 of the Heritage Act, an application is made under Section 140 of the Act. To obtain an excavation permit, the Section 140 application must include an archaeological assessment and Research Design. The archaeological assessment establishes the archaeological sensitivity of the site, its significance and the likely impact of the proposed development. The Research Design outlines the method proposed to mitigate the impact of the development (such as monitoring, test excavation, sampling, or open area excavation). The Research Design also provides research questions which the archaeological resource has the potential to answer. An archaeological assessment and Research Design need to be prepared in accordance with the Heritage Council's relevant guidelines, including Historical Archaeological Sites and the Historical Archaeology Code of Practice. For further details of these guidelines, refer to the Heritage Division website:

<http://www.environment.nsw.gov.au/heritage/publications/index.htm>

The Heritage Act also contains provisions for the unintentional disturbance of archaeological relics. Under Section 146 of the Act, the Heritage Council must be immediately notified in the event of relics being unintentionally located or disturbed. Works may be required to cease, pending consultation and further research.

Heritage and Conservation Register (Section 170 Register)

Under Section 170 of the Heritage Act, government instrumentalities must keep a Heritage and Conservation Register (a Section 170 Register) which contains items under the control or ownership of the agency and which are, or could, be listed as heritage items (of State or local significance). Road reserves within the study area are owned by the Department of Roads and Maritime Services.

The study area is not listed on any Section 170 Heritage and Conservation registers.

6.5 State Environmental Planning Policy (State and Regional Development) 2011

The proposed development has a CIV of more than \$30 million (refer to Cost Summary Report provided by Construction Consultants). Planning Panels determine regionally significant development listed in Schedule 7 of the SRDSEPP 2011. This includes general development that as a CIV of more than \$30 million.

As such, the development will be required to be determined by the Southern Joint Regional Planning Panel (JRPP).

6.6 State Environmental Planning Policy (Infrastructure) 2007

The aim of this policy is to facilitate the effective delivery of infrastructure across the State. It also provides for consultation with relevant public authorities during the assessment process or prior to development commencing.

The SEPP applies across the State and therefore applies to the subject site. *Part 3* contains development controls for various forms of development. The following provisions are relevant to the proposal:

- *Clause 87 - Impact of rail noise or vibration on non-rail development;*

6.6.1 Impact of rail noise or vibration on non-rail development (CI 87)

This clause applies to residential accommodation on land in or adjacent to a rail corridor that the consent authority considers likely to be affected by noise and vibration.

In accordance with *Subclause 3*, the consent authority must not grant consent to the development unless it is satisfied that appropriate measures will be taken to ensure that the following LAeq levels are not exceeded:

- (a) *in any bedroom in the residential accommodation—35 dB(A) at any time between 10.00 pm and 7.00 am;*
- (b) *anywhere else in the residential accommodation (other than a garage, kitchen, bathroom or hallway)—40 dB(A) at any time.*

The DA includes an Acoustic Report prepared by JHA Services which finds:

“Based on the assessment, the noise levels as a result of the additional traffic is anticipated to be insignificant.

An internal noise assessment has been carried out in accordance with AS3671:1989. Based on the assessment recommended acoustic performance has been nominated in order to achieve the internal noise levels as provided within Australian Standard AS2107:2016.

Based on the information presented within this report, relevant objectives will be satisfied and therefore approval is recommended to be granted.”

The report therefore addresses the above-mentioned noise measures and confirms that the internal noise requirements contained in *Clause 87* will be met, based on the standard construction methods proposed



without the need for additional acoustic treatment.

6.7 State Environmental Planning Policy 55 - Remediation of Land

The objective of this policy is to promote the remediation of contaminated land. The SEPP applies across NSW and therefore applies to the subject site.

Clause 7 requires the consent authority to consider whether or not the land is contaminated and if so, it must be suitable in its contaminated state (or will be suitable after remediation) for the purpose for which the development is to be carried out.

Before determining an application for consent to carry out development that would involve a change of use, the consent authority must consider a report specifying the findings of a preliminary investigation of the land concerned carried out in accordance with the contaminated land planning guidelines.

The site comprises of four individual allotments that have historically been used for light commercial and industrial purposes.

A Details Site Investigation Report (DSI) has been prepared by Douglas Partners Pty Ltd (attached to this application). The DSI report finds:

On the basis of the investigation findings, it is considered that the site is suitable for the proposed mixed used development from the contaminated land perspective subject to the following recommendations.

- A pre-demolition hazardous building materials survey be undertaken prior to the demolition of the site structures;*
- A waste classification assessment including an acid sulfate soils assessment, must be undertaken following the demolition of the existing structures but prior to removal of any surplus material from the site. This should specifically target identified potential sources of contamination for the purpose of waste classification;*
- As part of the off-site disposal or reuse classification for the natural materials, assessment will be required to validate that natural materials have not been impacted by former site activities, including the complete removal of overlying fill*
- Assessment of any fill that is proposed to be retained onsite. This would include a review of existing data, data that would be obtained as part of a waste classification assessment, and may require further assessment depending on the extent and type of*

fill proposed to be retained;

- *As a matter of due diligence and given the current buildings and hardstand areas precluding visual and physical access to the entire site, it is recommended that an unexpected finds protocol be implemented as part of a construction environmental management plan for any future proposed earthworks or development.”*

These findings can be conditioned as part of the consent and Council can be satisfied that the site can be made suitable for the proposed land uses and all relevant requirements of SEPP 55 have been appropriately considered and addressed.

6.8 State Environmental Planning Policy (Coastal Management) 2018

This policy applies to land within the coastal zone and aims to co-ordinate and integrate land use planning in a manner that is consistent with the objectives of the *Coastal Management Act 2016*, by:

- (a) managing development and protecting coastal assets;*
- (b) establishing a framework for land use planning to guide decision making; and*
- (c) mapping the four (4) coastal management areas that comprise the coastal zone.*

The maps adopted by this policy are available on the NSW Planning Portal. The policy does not apply to the subject site.

6.9 State Environmental Planning Policy (Building Sustainability Index: BASIX 2004)

This policy aims to encourage sustainable residential development (i.e. the BASIX scheme). It seeks to deliver equitable, effective water and greenhouse gas reductions across the State.

The SEPP operates in conjunction with the *EPAR 2000* to ensure the effective introduction of BASIX in NSW.

In accordance with *Clause 6(1)* of the SEPP, BASIX applies to *BASIX affected development* as defined by the *Regulations*. The proposed development is defined as *BASIX affected development* as it involves the erection of a *BASIX affected building* (i.e. a building that contains one or more dwellings but does not include a hotel or motel).

The proposal has been designed to achieve the appropriate *BASIX* classification as required and the relevant certification by Certified Energy is attached for consideration. In light of this, the proposed

development is considered to comply with the intent of this policy and all relevant controls.

6.10 State Environmental Planning Policy No 65 - Design Quality of Residential Apartment Development

This policy aims to improve the design quality of residential apartments in NSW. The proposed development involves the construction of seventy new residential apartments and as such, the provisions of SEPP 65 and the *Apartment Design Guide (ADG)* apply to the proposal.

The SEPP establishes nine (9) design quality principles to be applied in both the design and assessment of the development. In this regard, please refer to the SEPP 65 design quality principles statement prepared by Brewster Murray, which responds to the 9 principles accordingly, and how they have influenced the subject design and develop an outcome. In this regard, the ADG provides key design criteria controls to aid high quality design outcomes, of which the following

<i>Design Criteria</i>	Requirement	Comment	Compliance
<i>3D Communal & Public Open Space</i>	<ol style="list-style-type: none"> Communal open space has a minimum area equal to 25% of the site Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9am and 3pm on 21 June (mid winter) 	<ol style="list-style-type: none"> 646.5m² proposed = 25% of site Provided on Level 1 and Level 6 Proposed podium COS will receive more than 2 hrs of direct sunlight 	<ol style="list-style-type: none"> Yes Yes
<i>3E Deep Soil Zones</i>	Deep soil zones for sites over 1500m ² are to meet the following minimum requirements: <ul style="list-style-type: none"> Minimum Dimension : 6m Percentage of site area: 7% This would generally be provided upon a podium in conjunction with any COS, given the shop top housing type development sought. This requirement is not deemed essential, but preferred if can be accommodated.	N/A at ground level due to B3 commercial core location. However, deep soil areas have been included at ground level along the easement and within the upper level COS podium planters	Yes
<i>3F Visual Privacy</i>	Minimum required residential	-Nil boundary setback up	No (See

	<p>separation distances from buildings to the side and rear boundaries are as follows:</p> <p>Buildings up to 12m (4 storeys): Habitable rooms and balconies: 6m Non-habitable rooms: 3m</p> <p>Buildings up to 25m (5-8 storeys): Habitable rooms and balconies: 9m Non-habitable rooms: 4.5m Non-habitable rooms: 3m</p> <p>Buildings over 25m (9 storeys): Habitable rooms and balconies: 12m Non-habitable rooms: 6m</p> <p>Commercial setbacks up to street frontage height as per LEP.</p>	<p>to SFH 8m min. setback to habitable rooms between SFH and 45m -12m min. setback above 45m</p>	<p>justification below)</p>
3J Bicycle & Car Parking	<p>The site is located on land that is zoned B3 and as such, the minimum car parking requirement for residents and visitors is whichever is less between the Guide to Traffic Generating Developments and Council's DCP, which is:-</p> <p>RMS 0.6 spaces per 1 bed unit or 0.9 spaces per 2 bed unit or 1.4 spaces per 3 bed unit or plus 1 space per 5 units (visitor parking)</p> <p>Council's DCP 0.75 car space per dwellings (<70m²) or 1 car spaces per dwelling (70-110m²) or 1.25 car spaces per dwelling (>110m²), plus 0.2 car parking spaces per dwelling for visitors.</p> <p>The car parking needs for development must be provided off street.</p> <p>Parking rates for commercial components are discussed below in DCP considerations.</p>	<p>140 Spaces 110 Residential 8 Commercial 22 Visitors 48 Bicycles 8 Motorcycles</p>	
4A Solar & Daylight Access*	<p>Living rooms and private open spaces of at least 70% of apartments in a building receive a minimum of 2 hours direct sunlight between 9 am</p>	<p>At least 70% of apartments in a building receive a minimum of 2 hours direct sunlight</p>	<p>Yes</p>

	<p>and 3 pm at mid winter in Sydney Metro Area and Newcastle and Wollongong LGA's;</p> <p>A maximum of 15% of apartments in a building receive no direct sunlight between 9 am and 3pm at mid winter.</p>		
<i>4B Natural Ventilation</i>	<ol style="list-style-type: none"> At least 60% of apartments are naturally cross ventilated in the first nine storeys of the building; Overall depth of a cross-through apartment does not exceed 18m, measured glass line to glass line 	<ol style="list-style-type: none"> 60% of units would appear to have crossflow ventilation Apartment depth would appear to comply 	<ol style="list-style-type: none"> Yes Yes
<i>4C Ceiling Heights</i>	<p>Ground floor and first floor commercial 3.3m minimum Residential habitable rooms 2.7m; Residential non-habitable 2.4m.</p>	<p>Ground Floor Commercial = 3.35m Residential Levels = 2.8m</p>	Yes
<i>4D-1 Apartment Size & Layout</i>	<p>Apartments are required to have the following minimum internal areas:</p> <ul style="list-style-type: none"> Studio 35m²; 1 bedroom 50m²; 2 bedroom: 70m²; 3 bedroom: 90m². 	<p>All dwelling sizes achieve these minimum area requirements</p>	Yes
<i>4D-2 Apartment Environmental Performance</i>	<ol style="list-style-type: none"> Habitable room depths are limited to a maximum of 2.5 x ceiling height In open plan layouts (where the living, dining and kitchen are combined) the maximum habitable room depth is 8m from a window 	<ol style="list-style-type: none"> Whilst dimensions are not provided on the Architectural plans by Brewster Murray, all apartments would appear to accord with room depth performance Whilst dimensions are not provided on the Architectural plans by Brewster Murray, the proposed apartments have clearly been designed mindful of this control 	<ol style="list-style-type: none"> Yes Yes
<i>4E Private Open Space & Balconies</i>	<p>All apartments are required to have primary balconies as follows:</p>	<p>The POS areas indicated on the Architectural plans</p>	Yes.

	<ul style="list-style-type: none"> 1 bedroom apartments: 8m² area, minimum depth 2m 2 bedroom apartments: 10m² area, minimum depth 2m 3+ bedroom apartments: 12m² area, minimum depth 2.4m <p>Apartments at ground level or on a podium or similar structure, private open space is to be a minimum depth of 3m and area of 15m².</p>	by Brewster Murray, which accord with these minimum requirements.	
4F Common Circulation & Spaces*	The maximum apartments off a circulation core on a single level is eight.	The proposed circulation arrangements accord with this criteria	Yes
4G Storage	<p>In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided:</p> <ul style="list-style-type: none"> 2 bedroom apartments: 8m³ 3+ bedroom apartments: 10m³ <p>At least 50% of the required storage is to be located within the apartment.</p>	Whilst storage area schedules are not provided on the Architectural plans by Brewster Murray, the proposed would appear to accommodate sufficient storage areas for all dwellings	Yes

Table 6: Compliance Table - Summary of Key Design Criteria (ADG)

The non-compliances detailed in *Table 6* are addressed in further detail below.

Building Separation

The proposed development resulting from this variation will result in no unacceptable adverse environmental impacts. The building intrusions into the side setbacks are a direct design response with the intent to allow the site to respond to the demand for housing in the area, whilst supporting Wollongong Councils objectives for built form within the B3 zoned City Centre.

The proposed bulk and scale of this building is considered appropriate for this City Centre location, and will not detrimentally affect the visual appearance of the area (in fact it will substantially improve an aged part of the City, which is undergoing change with other similar scale redevelopments occurring nearby). The overall height and form of the development is consistent with expected future desired character strategies for the area.

We acknowledge the proposed development will bring some overshadowing impact upon the neighbouring properties to the south. Practically, due to site orientation it would be almost impossible to



redevelop the subject site for anything greater than a few storeys without having any impact whatsoever. At this point in time, all development to the south is commercially warranted activities, which means no unreasonable loss of residential amenity will be created as a result of the proposal.

It is noted that the properties to the north and south contain aged commercial structures/developments that visually appear to be in a condition well beyond their economic life. It is likely that these will be demolished in the near future to make way for a more upscale development outcome. In accordance with the strategic objectives of this zone, the sites would likely be developed in the future in accordance with more appropriate and permitted land use activities, and subsequent densities allowable under respective FSR and building height controls. The flexibility to accommodate any overshadowing impacts within a new development concept upon this land should appropriately be available given yield possibilities. Therefore, the proposed development will not restrict opportunities into the future.

The proposed development complies with the maximum building height and FSR requirements for this B3 zoned location. The reduced building separation is deemed reasonable and acceptable due to the reduced impacts to privacy and overlooking, created specifically by responsive architectural interface treatment to these boundaries (almost as if they were non-habitable type facades).

The layout and built form of the proposed development is contemporary in character and has been designed to reflect the pleasing amenity of the evolving 'City Centre' area. This fifteen (15) storey building has a simple, yet interesting elevation, with a combination of materials, colours and façade articulation.

The development has been specifically designed to provide a suitable environment for all future inhabitants of the dwellings, whilst respecting the considerations of adjoining land uses. The internal layout of the rooms attempt to minimise overlooking with the careful location of window and door openings, whilst the size of external balconies also help maintain such visual separation.

Acoustic privacy for future visitors and neighbouring land uses has also been taken into account, with the proposed development being designed to limit noise intrusion into adjoining properties through the use of appropriate building materials and associated noise control treatments. The proposed development has been supported by a Noise Assessment prepared by JHA Services, which provides a range of acoustic recommendations to ensure the proposed development will comply with the relative sections of the EPA and Council requirements/conditions, and will not create any offensive noise to the surrounding residents.

Overall, it is evident from the above commentary provided that there are sufficient planning grounds to justify contravening the building separation development standards identified. To this end, strict compliance with the numerical development standards are both unwarranted and unnecessary in this instance.

A Design Verification Statement has been prepared by Brewster Murray and addresses the above-

mentioned design quality principles. The proposal is generally consistent with the ADG, as indicated in the compliance analysis provided by Brewster Murray.

6.11 Wollongong Local Environmental Plan 2009

6.11.1 Land Use Zone and Permissibility

The site is zoned B3 Commercial Core under the *WLEP 2009*, as shown in the extract from the Land Zoning Map in *Figure 7* below.



Figure 7: Extract of the WLEP 2009 Zoning Map (*Source: Dehko Mapping)

The proposed mixed use development comprises of two (2) different land uses (i.e. commercial/retail premises and shop top housing), which are both permitted with development consent.

6.11.2 Consistency with Zone Objectives

The proposal is consistent with the relevant objectives of the zone, as detailed in *Table 6* below.

B3 Zone Objectives	Comment
<ul style="list-style-type: none"> To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community. 	<p>The development provides four (4) commercial tenancies (café, office and 2 x Retail premises) at ground level that will serve the needs of the local and wider community.</p>

<ul style="list-style-type: none"> • To encourage appropriate employment opportunities in accessible locations. 	<p>The development will provide on-going employment opportunities, in an accessible location (proximal to Wollongong Railway Station).</p>
<ul style="list-style-type: none"> • To maximise public transport patronage and encourage walking and cycling. 	<p>The site is conveniently located close to Wollongong Station, which maximises the potential for use of public transport. The development provides facilities for bicycle storage and is situated within Wollongong City Centre, to encourage walking and cycling.</p>
<ul style="list-style-type: none"> • To strengthen the role of the Wollongong city centre as the regional business, retail and cultural centre of the Illawarra region. 	<p>The proposed redevelopment of the site will support this objective and contribute to strengthening the role of Wollongong City Centre, as the regional business, retail and cultural centre.</p>
<ul style="list-style-type: none"> • To provide for high density residential development within a mixed use development if it: (a) is in a location that is accessible to public transport, employment, retail, commercial and service facilities, and (b) contributes to the vitality of the Wollongong city centre. 	<p>The proposed mixed use development provides high density residential development in an accessible location, close to shops, services and employment. This will contribute to the vitality of Wollongong City Centre by providing additional density to support the existing and proposed commercial uses.</p>

Table 7: Compliance with B3 Zone Objectives

6.11.3 Minimum Subdivision Lot Size (Clause 4.1)

There is no minimum lot size applicable to the subject site.

6.11.4 Height of Buildings (Clause 4.3)

A maximum building height of 24m to the East and 48m to the West applies to the site, as shown in the extract from the Height of Buildings Map in *Figure 8* below.

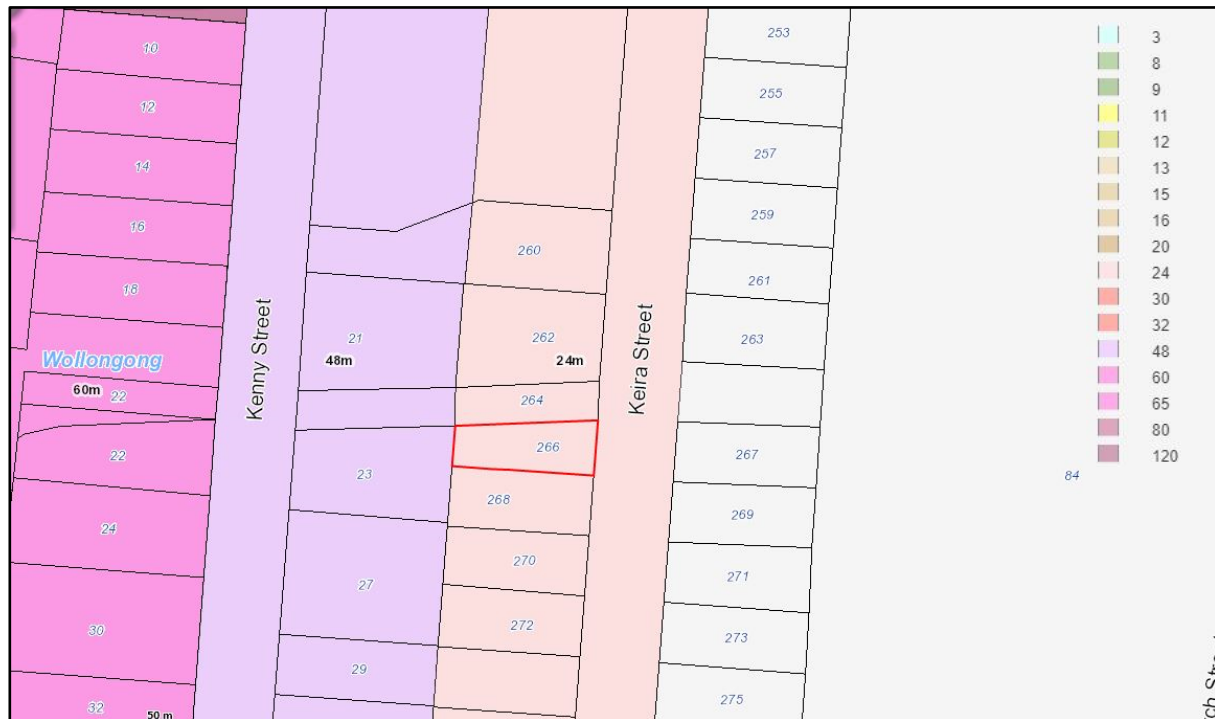


Figure 8: Extract of the WLEP 2009 Height of Buildings Map (*Source: Dehko Mapping)

The proposed development has a maximum building height of 48 metres to the West and 22.5m to the East and is fifteen (15) storeys in height.

As such, it is within the afore-mentioned maximum height limits and complies with the applicable development standard in this regard.

6.11.5 Floor Space Ratio for Wollongong City Centre (Clause 4.4A)

This clause applies to land in the Wollongong City Centre and sets aside the provisions contained within Clause 4.4 (i.e. the maximum Floor Space Ratio (FSR) of 1.5:1 shown on the Floor Space Ratio Map).

Clause 4.4A(4) provides:

“The maximum floor space ratio for a building on land within a business zone under this Plan, that is to be used for a mixture of residential purposes and other purposes, is:

$$(NRFSR \times NR/100) + (RFSR \times R/100):1$$

where:

NR is the percentage of the floor space of the building used for purposes other than residential purposes.

NRFSR is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for purposes other than residential purposes.

R is the percentage of the floor space of the building used for residential purposes.
RFSR is the maximum floor space ratio determined in accordance with this clause if the building was to be used only for residential purposes.

Note. The following gives an example of how a maximum floor space ratio is to be calculated for a building on land, having a site area equal to or greater than 2,000 square metres and a street frontage equal to or greater than 20 metres, that is within Zone B3 Commercial Core, 30 per cent of which is to be used for purposes other than residential purposes and 70 per cent of which is to be used for residential purposes:

$$\begin{aligned} & ((NRFSR \times NR/100) + (RFSR \times R/100)):1 \\ & ((6 \times 30/100) + (3.5 \times 70/100)):1 \\ & (1.8 + 2.45):1 \end{aligned}$$

4.25:1 is the maximum floor space ratio.”

The site has an area of 2586m² and as such, the maximum FSR applicable to the proposed development is 3.66:1. The development proposes an FSR of 3.65:1 (or 9449m²). Hence, the proposal complies with the applicable development standard in this regard.

6.11.6 Heritage Conservation (Clause 5.10)

The site is situated directly opposite a heritage item, as shown in the following extract from the WLEP 2009 Heritage Map in Figure 9.

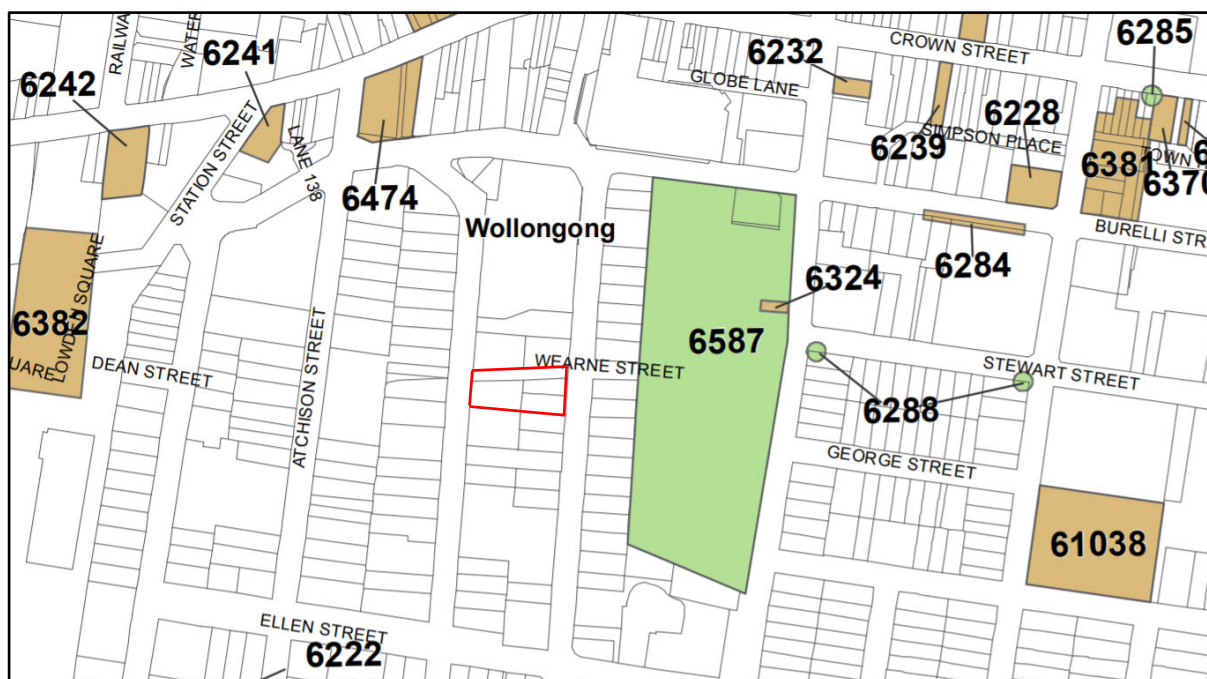


Figure 9: Extract of the WLEP 2009 Heritage Map (*Source: Dehko Mapping)



The site is not a heritage item but is located adjacent to McCabe Park, which is listed in *Schedule 5* of the *WLEP 2009*. The mitigation of any solar impact on the heritage item is ensured through compliance with *Clause 8.3* of *WLEP 2009*. Council records indicate the site may contain potential European Archaeological artefacts relating to the historical drainage easement. As such, a Historical Heritage Assessment & Statement of Heritage Impact has been prepared by Austral Archaeology and concludes and recommends:

The development is in the vicinity of a war memorial and sandstone arch, and Canary Island date palms located in MacCabe Park. These items are both of local heritage significance and are listed under Schedule 5 of the Wollongong LEP. The development will not impact directly on these items and any potential impacts to these items from the development are likely to be minimal based upon the nature, configuration and location of these items.

The significance of the Canary Island date palms relates to their importance as a collection of notable, aged examples which represent earlier attempts to beautify the city by Council. This significance is confined to the park itself and does not extend to include any adjacent properties. The war memorial and arch are significant landscape elements in Wollongong and serve an important role in ANZAC commemoration activities undertaken across the city. However, the memorials are located within a grove of trees which visually and physically separate it from the surrounding parkland.

The development will have a minimal impact on the heritage significance of either item. The proliferation of modern developments within the locality have already had impacts on the heritage value of the area. The only quantifiable impact to the date palms is on the west facing view from the palms looking towards Keira Street, where a few outlying palms are located. However, this view already consists of unaesthetic factory buildings.

While the study area has been identified as containing potential archaeological relics, these are to be handled through the implementation of an archaeological testing and, if required, salvage program.

*The development is **acceptable** from a heritage standpoint.*

In order to mitigate against the harm documented in this assessment, it is recommended that:

- 1) Given that parts of the study area have been assessed as having archaeological potential, and relics of local significance are likely to be impacted during the proposed construction works, an excavation permit is required under the NSW Heritage Act 1977. The proponent should apply for a Section 140 Excavation Permit. A suitably accredited archaeologist who is approved by the heritage team of the DPC to oversee the excavation of sites of local significance will need to be nominated as Excavation Director.*



- 2) *Following demolition of the existing building down to any concrete hardstand, archaeological investigations will be required in advance of construction. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing, and potentially salvage, programme overseen by the nominated Excavation Director.*
- 3) *In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and the Heritage Division be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist is to be contacted to assess the situation and consult with the heritage team of the DPC regarding the most appropriate course of action.*
- 4) *In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Aboriginal heritage team of the DPIE and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the National Parks & Wildlife Act 1974 requires that the DPIE must be notified of any Aboriginal objects discovered within a reasonable time.*
- 5) *Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 7 and the installation of any subsurface services.*
- 6) *A copy of this assessment should be lodged by the proponent in the local history section of the local library, and in the library maintained by the heritage team of DPC.*

Clause 5.10(4) requires the consent authority to consider the effect of the proposed development on the heritage significance of the item concerned. In this regard, the recommendations of the report can be conditioned as part of the consent to ensure that Council can be satisfied that any artefacts found will be dealt with in the appropriate manner and the site and development suitably progressed.

6.11.7 Public Utility Infrastructure (Clause 7.1)

The objective of this clause is to ensure that sufficient infrastructure is available to service development. The site is located within an existing commercial area and is currently serviced by water, electricity and sewer. As such, essential public utility infrastructure is available to service the development.

6.11.8 Flood Planning (Clause 7.3)

This Clause applies to land identified as “*Flood Planning Area*” on the Flood Planning Map and other land at or below the flood planning level. The relevant objectives of this clause are to maintain the existing flood regime and flow capacity, to enable evacuation and avoid significant adverse impacts on flood behaviour. It also seeks to limit uses to those compatible with flood hazard.

The site is identified as being affected by flood (Medium and High Flood Risk Precinct) having a significant bearing on the project requiring “*no encroachment into the High Flood Risk Precinct area, no reduction in conveyance capacity of the site, and no increase in flooding elsewhere, as a result of the development. The overland flow path through the site will need to be maintained.*” (Pre-lodgement notes – PL-2018/235). An independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd (attached to this application) in accordance with Chapters E13 and E14 of the WDCP 2009.

The flood impact assessment addresses the issue of flood risk and satisfy the consent authority that the matters outlined in Subclause 3 have been addressed. Namely, that:

“The results show that the proposed development site is affected by overland flow, with maximum depths of approximately 350 mm during the 1% AEP. In the proposed development scenario, the maximum peak flood depth is 340mm. For both the existing and proposed scenario the average peak flood depths is 160mm across the site and drainage easement.

Modelling indicates the proposed development results in no tangible increase in peak flood level for events up to and including the 1% AEP. Flood storage within the site and the drainage easement increase by 16 m³ during the 1% AEP.”

The advice confirms that the appropriate flood risk management measures have been undertaken in relation to flood levels and overland flow. In this regard, it is considered the impacts of localised flooding will be suitably managed and are not a prohibitive constraint for the proposed development.

6.11.9 Earthworks (Clause 7.6)

This clause seeks to ensure that any proposed earthworks do not have a detrimental impact on environmental functions and/or features surrounding the land.

Sub-clause 3 reads as follows:

“Before granting development consent for earthworks, the consent authority must consider the following matters:

- (a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,*
- (b) the effect of the proposed development on the likely future use or redevelopment of the land,*
- (c) the quality of the fill or of the soil to be excavated, or both,*
- (d) the effect of the proposed development on the existing and likely amenity of adjoining properties,*
- (e) the source of any fill material or the destination of any excavated material,*
- (f) the likelihood of disturbing Aboriginal objects or other relics,*
- (g) proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.”*

The proposed earthworks include excavation for the basement and the provision of public utility infrastructure. In this regard, a Geotechnical Report has been prepared by Alliance Geotechnical Pty Ltd to address the afore-mentioned matters for consideration. It should be noted that considerations have been put in place with respect to the current Right Of Carriageway (ROC) benefiting the northern neighbour. To this end, the ROC will be temporarily out of use during the excavation and construction of basement, so the provision for a through-site vehicular link along the northern boundary from Kenny Street to Keira Street will be put in place during construction of the basement. This will ensure the northern neighbour can temporarily still retain access to and from the property, until basement works are complete and the dedicated ROC can be re-established as existing.

Therefore, Council can be satisfied that the work proposed can be undertaken in an appropriate manner, without any unreasonable disruptions and/or any significant adverse impacts on surrounding properties.

6.11.10 Certain Land Within Business Zones (Clause 7.13)

The intent of this clause is to ensure active uses are provided at the street level to encourage the presence and movement of people. It clause applies to land in the B3 Commercial Core Zone.

Sub-clause 3 reads as follows:

“Development consent must not be granted for development for the purpose of a building on land to which this clause applies unless the consent authority is satisfied that the ground floor of the building:

- (a) will not be used for the purpose of residential accommodation, and*
- (b) will have at least one entrance and at least one other door or window on the front of the building facing the street other than a service lane.”*



The ground floor of the building will not be used for residential accommodation and will have at least one entrance and at least one other door/window on the front of the building facing the street. Accordingly, the proposed development complies with the requirements of this clause and satisfies the underlying objective.

6.11.11 Design Excellence in Wollongong City Centre (Clause 7.18)

The objective of this clause is to deliver the highest standard of architectural and urban design. The Clause applies to the development of land within the Wollongong City Centre involving the construction of a new building (or external alterations to an existing building).

Development consent must not be granted unless in the opinion of the consent authority, the proposed development exhibits design excellence.

Sub-clause 4 reads as follows:

“ In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:

- (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
- (b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*
- (c) whether the proposed development detrimentally impacts on view corridors,*
- (d) whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,*
- (e) how the proposed development addresses the following matters:*
 - (i) the suitability of the land for development,*
 - (ii) existing and proposed uses and use mix,*
 - (iii) heritage issues and streetscape constraints,*
 - (iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
 - (v) bulk, massing and modulation of buildings,*
 - (vi) street frontage heights,*
 - (vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
 - (viii) the achievement of the principles of ecologically sustainable development,*



- (ix) pedestrian, cycle, vehicular and service access, circulation and requirements,*
- (x) impact on, and any proposed improvements to, the public domain.”*

The architectural design, materials and detailing are of a high standard that is appropriate to the building type and location. The external appearance and form of the development will improve the quality and amenity of the public domain in the immediate vicinity of the site.

The proposal will not unreasonably impact on view corridors given it is below the maximum height limit of 48m allowed to the western side of the site and less than 24m permitted on the eastern side of the site under the *WLEP 2009*. In addition, the proposal will not overshadow the areas shown on the Sun Plane Protection Map.

The land is suitable for the proposed mixed use development and the allocated mix of commercial/residential floor space, given the location of the site on the edge of the City Centre.

The proposal will be compatible with future developments in the immediate vicinity of the site and therefore will enhance the streetscape (which currently contains several older style buildings that are in need of refurbishment or repair, including those situated on the subject site that will be demolished as part of the DA).

The location of the tower and the proposed bulk, massing and modulation of the building is acceptable and does not result in any unreasonable loss of amenity to any of the adjoining properties. The proposed street frontage heights are considered appropriate having regard to the surrounding context and scale of development.

The proposal will have no significant adverse environmental impacts in terms of sustainability, overshadowing, wind and/or reflectivity. Relevant details have been provided in this regard to enable a full assessment (i.e. shadow diagrams, wind report, BASIX certificates etc).

Access to the site has been carefully considered in a variety of forms (i.e. for pedestrians, motorists and cyclists alike), with suitable provisions to allow for service access and circulation. The proposed development will have a positive impact on the public domain and interface of Keira and Kenny Streets.

This will significantly improve the amenity and character of the blocks/precinct surrounding the location. It will also allow for natural surveillance of the area with regards to the principles of Crime Prevention Through Environmental Design (CPTED).



In accordance with *Subclause 5*, development consent must not be granted unless the design review panel (DRP) has reviewed the design of the proposed development as the building is greater than 35 metres in height.

The preliminary concept plans have been reviewed by the DRP, prior to DA lodgement. It is understood that the proposal will be referred back to the DRP for comment as part of the DA process.

6.11.12 Objectives for Development in Wollongong City Centre (Clause 8.1)

The provisions in *Part 8* apply to land in the Wollongong City Centre and the objectives of this Part are as follows:

- “(a) to promote the economic revitalisation of the Wollongong city centre,*
- (b) to strengthen the regional position of the Wollongong city centre as a multifunctional and innovative centre that encourages employment and economic growth,*
- (c) to protect and enhance the vitality, identity and diversity of the Wollongong city centre,*
- (d) to promote employment, residential, recreational and tourism opportunities within the Wollongong city centre,*
- (e) to facilitate the development of building design excellence appropriate to a regional city,*
- (f) to promote housing choice and housing affordability,*
- (g) to encourage responsible management, development and conservation of natural and man-made resources and to ensure that the Wollongong city centre achieves sustainable social, economic and environmental outcomes,*
- (h) to protect and enhance the environmentally sensitive areas and natural and cultural heritage of the Wollongong city centre for the benefit of present and future generations.”*

The proposal development is consistent with the afore-mentioned objectives as it will result in the economic revitalisation of land in the Wollongong City Centre and directly promotes residential and employment opportunities. It will deliver development of building design excellence as appropriate to a regional city and provides a mix of housing that is affordable (i.e. combination of one (1), two (2), three (3) and four (4) bedroom apartments).

6.11.13 Sun Plane Protection (Clause 8.3)

The objectives of this clause are to protect specified public open space from excessive overshadowing by restricting the height of buildings. Development on land to which this clause applies is prohibited if the development results in any part of a building projecting above a sun access control set out in this clause.



(5) The sun access control for any point on land shown coloured yellow on the *Sun Plane Protection Map* and marked “MacCabe Park—Keira Street” is:

- (a) 24 metres above the point, or
- (b) if the point is within 4.4 metres of the boundary of Keira Street— $20 + (0.9091 \times D)$ metres above the point,
where **D** is the shortest distance in metres between the point and the boundary of Keira Street.

The development has been designed to ensure there is no unreasonable overshadowing from the proposed development to the adjacent heritage item – McCabe park. Updated solar impact analysis drawings have been prepared by Brewster Murray, which are attached to the application resubmission package. As shown, there is limited impact on McCabe Park throughout the day, with partial overshadowing identified only occurring from 3 PM onwards. These limited afternoon impacts are deemed acceptable, particularly as the proposed built form complies with Council’s WLEP 2009 Clause 8.3 Sun plane protection controls (which is a direct measure of acceptability).

6.11.14 Minimum Building Street Frontage (Clause 8.4)

The objective of this clause is to ensure that buildings have a minimum width to provide for the efficient development of land and design of buildings. Development consent must not be granted to the erection of a building that does not have at least one street frontage of 20m or more on land within Zone B3 Commercial Core.

The subject site has a frontage of 38.6m to Keira Street to the east, and 28.84m to Kenny Street to the west and therefore complies with the requirements of this clause.

6.11.15 Building Separation with Zone B3 Commercial Core (Clause 8.6)

This Clause seeks to ensure sufficient separation of buildings for visual appearance, privacy and solar access reasons. In accordance with *Sub-clause 2*, buildings on land within Zone B3 Commercial Core must be erected so that:

- “(a) there is no separation between neighbouring buildings up to the street frontage height of the relevant building or up to 24 metres above ground level whichever is the lesser, and
- (b) there is a distance of at least 12 metres from any other building above the street frontage height and less than 45 metres above ground level, and
- (c) there is a distance of at least 28 metres from any other building at 45 metres or higher above ground level.



Despite subclause (2), if a building contains a dwelling, all habitable parts of the dwelling including any balcony must not be less than:

- (a) 20 metres from any habitable part of a dwelling contained in any other building, and*
- (b) 16 metres from any other part of any other building.*

(4) For the purposes of this clause, a separate tower or other raised part of the same building is taken to be a separate building.

(5) In this clause:

street frontage height means the height of that part of a building that is built to the street alignment.”

The proposed development contains dwellings with habitable parts of the dwellings (including bedrooms and balconies) situated some 8.05 metres minimum away from the northern boundary and 8.8 metres minimum from the southern boundary at Level 1. There are no adjoining residential developments to the north or south (existing, or approved and yet to be constructed) to which the development essentially complies with this control. However, this unfairly limits developments on the northern and southern sites and, therefore, it should be taken that the development falls short of the minimum 16m building separation requirement contained in *Clause 8.6(3)(b)* to which a *Clause 4.6* variation is requested.

An exception to the development standard is submitted to address the above non-compliance and is attached as *Appendix 1* for review.

6.12 Wollongong Development Control Plan 2009

The following parts of the *WDCP 2009* are relevant to this proposal:

- *Chapter D13 - Wollongong City Centre;*
- *Chapter A1 - Introduction;*
- *Chapter E1 - Access for People with a Disability;*
- *Chapter E2 - Car Parking, Access, Servicing/Loading Facilities and Traffic Management;*
- *Chapter E6 - Landscaping;*
- *Chapter E7 - Waste Management;*
- *Chapter E11 - Heritage Conservation;*
- *Chapter E14 - Environmental Management;*
- *Chapter E15 - Water Sensitive Urban Design;*
- *Chapter E19 - Earthworks;*
- *Chapter E20 - Contaminated Land Management;*

- Chapter E21 - Demolition and Asbestos Management;
- Chapter E22 - Soil Erosion and Sediment Control.

Most of the controls of relevance are contained within *Chapter D13*.

The proposed development has been designed to address both the objectives and numerical requirements of the DCP. Compliance with key controls is outlined in *Table 7* below.

6.12.1 Wollongong City Centre Controls (Chapter D13)

The proposal substantially complies with the relevant provisions of the DCP.

Compliance Table - Summary of Key Numerical Controls (WDCP 2009)		
Part/ Section	Control	Compliance
2.2	Street building alignment and setbacks -Build to Street alignment -4m setback above street frontage height (SFH)	No (See justification below) -Nil setback to Keira and Kenny Streets -2.8m setback above street frontage height.
2.3	Street frontage heights -12 to 24m preferred (or height to street width ratio of 1:1)	Yes -24m
2.4	Building depth and bulk -900m ² max. floor plate (applicable to residential apartments) above 24m in height -18m max. building depth (excl. balconies)	No (See justification below) -<900m ² max. floor plate (applicable to residential apartments) above 24m in height - 26.8 metres max. building depth (excl. balconies)
2.5	Side and rear boundary setbacks -Nil boundary setback up to SFH -12m min. setback to habitable rooms between SFH and 45m -14m min. setback all uses above 45m	No (See justification below) -Nil boundary setback up to SFH -8m min. setback to habitable rooms between SFH and 45m -12m min. setback above 45m
2.6	Mixed Use Buildings -3.3-3.6m min. floor to ceiling height for commercial -clearly marked residential entries directly from public street	-4.2m -clearly marked residential entries directly from public street
2.7	Deep Soil Zone -15% site area with 6m min. dimension	No (See justification below) 7%

		<p>The subject site is located within a B3 Commercial Core location, which incorporates a shop top housing proposal with a commercial base. Deep soil zones are not required in this instance, as is consistent theme for City Centre environments such as this. The area within the drainage easement previously identified as deep soil zone is not appropriate given the flood conditions of the site and location of Council's stormwater assets. Thus, large trees and landscape plantings cannot be located in this part of the site and, as such, a responsive landscape design has been put in place as per the documentation prepared by Site Image.</p> <p>Notwithstanding this, a conscious effort has been made to embellish landscape planting opportunities upon the podium communal open space area, so as to soften and enhance this area as a green space for the enjoyment of future residents and visitors.</p>
2.8-2.9	Landscaping, Green Roofs\Walls and Planting -Landscape plan to address Chapter E6 of DCP -encourage the use of green walls/roofs in communal open space	Yes -Landscape plan to address Chapter E6 of DCP
3.1	Pedestrian Amenity -high quality urban design and pedestrian domain	Yes -detailed on architectural drawings and responds to Wollongong City Centre Access and Movement Strategy 2005
3.3	Active Street Frontages -active ground floor uses at or close to street level	Yes -active ground floor uses at or close to street level
3.4	Safety and Security -CPTED principles to be adopted	Yes -CPTED principles adopted
3.5	Awnings -continuous street awnings above each street frontage	Yes -continuous street awnings above each street frontage
3.8	Building Exteriors -contribute positively to streetscape and public domain by means of high quality design and robust materials/finishes	Yes -contribute positively to streetscape and public domain by means of high quality design and robust materials/finishes
3.9	Signage	Not proposed
4.4	On-Site Parking -must meet AS 2890.1 2004	Yes -complies with AS 2890.1 2004
4.5	Site Facilities and Services -are integrated into the development as required -waste storage to be enclosed within basement or not visible from main street frontage	Yes -are integrated into the development as required -waste storage to be screened from view
5.2	Energy Efficiency -BASIX compliance required -4 star min. NaBERS rating	Yes -BASIX compliance is provided -4 star min. NaBERS rating

		Apartment 514 double height apartment achieves solar access. Brewster Murray have removed 1 maisonette apartment and kept 1 to the top so that solar access is not compromised PV panels provided at roof level
5.5	Wind Mitigation -Wind effects report required for all development >32m in height to confirm DCP requirements can be satisfied	Yes -Wind report provided to confirm the proposal is acceptable and meets DCP requirements - wind breaks provided to plans
6.2	Housing Choice and Mix -one bedroom apartments must not be less than 10% of dwelling mix -10% of all dwellings must be adaptable	Yes -one bedroom apartments are 34% of dwelling mix -10% of dwellings are adaptable

Table 8: Compliance Table - Summary of Key Numerical Controls (WDCP 2009)

The non-compliances detailed in *Table 8* are addressed in further detail below.

Street Building Alignments

The proposal has a nil boundary setback to Keira and Kenny Streets in part and then steps in by a distance of 1.0m – 4.0m at different parts of the building to accommodate balconies to the street facing apartments.

The objectives of this control are:

- a) To provide a hierarchy of street edges from commercial core with no street setbacks to residential locations with landscaped setbacks.*
- b) To establish the desired spatial proportions of the street and define the street edge.*
- c) To increase a clear transition between public and private space.*
- d) To locate active uses, such as shopfronts, closer to pedestrian activity areas.*
- e) To assist in achieving visual privacy to apartments from the street.*
- f) To create good quality entry spaces to lobbies, foyers or individual dwelling entrances.*
- g) To allow an outlook to, and surveillance of, the street.*
- h) To allow for street landscape character, where appropriate.*
- i) To maintain shared views to the ocean.*
- j) To maintain sun access to the public domain.*

The proposed setbacks reinforce the street edge and in this regard is compatible with the other similar developments in the area which are built to boundary. Active uses are located close to pedestrian activity areas and there is a clear transition between public and private space.



In this regard, the proposed development satisfies the relevant objectives contained within *Chapter 13, Section 2.2.2* (i.e. objectives a, b, c, d, f, g, and h) and as such, non-compliance with the numerical control is considered to be acceptable in this instance.

Maximum Building Depth

Section 2.4.3 of Chapter 13 stipulates a maximum building depth of 18m for residential apartments in the Commercial Core. The proposed development has a maximum building depth of 26.8m and therefore, exceeds the maximum numerical requirement.

The objectives of this control are:

- a) To promote the design and development of sustainable buildings.*
- b) To achieve the development of living and working environments with good internal amenity and minimise the need for artificial heating, cooling and lighting.*
- c) To provide viable and useable commercial floor space.*
- d) To achieve usable and pleasant streets and public domain at ground level by controlling the size of upper level floor plates of buildings.*
- e) To achieve a city skyline sympathetic to the topography and context.*
- f) To allow for view sharing and view corridors.*
- g) To reduce the apparent bulk and scale of buildings by breaking up expanses of building wall with modulation of form and articulation of facades.*

The objectives of the control (detailed in *Section 2.4.2*) seek to reduce the bulk and scale of the building by breaking up the building wall with modulation of form and articulation of facades. The proposed development has been designed with this objective in mind and the built form has been broken up appropriately, to reduce the overall bulk and scale of the building.

As such, the proposed building depth is considered acceptable and is proportionate to the site area and dimensions.

Deep Soil Zone

7% of the site is provided as deep soil area located to the north of the site within the area acting as both a cross link and overland flow path. The quality and amenity of the available deep soil area allows for rainwater infiltration which will reduce stormwater run-off, promote the healthy growth of large trees.

The objectives of this control are:



- a) To provide an area on sites that enables soft landscaping and deep soil planting, permitting the retention and/or planting of trees that will grow to a large or medium size.*
- b) To limit building bulk on a site and improve the amenity of developments, allowing for good daylight access, ventilation, and improved visual privacy.*
- c) To provide passive and active recreational opportunities.*

The subject site is located within a B3 Commercial Core location, which incorporates a shop top housing proposal with a commercial base. Deep soil zones are not required in this instance, as is consistent theme for City Centre environments such as this. The area within the drainage easement previously identified as deep soil zone is not appropriate given the flood conditions of the site and location of Council's stormwater assets. Thus, large trees and landscape plantings cannot be located in this part of the site and, as such, a responsive landscape design has been put in place as per the documentation prepared by Site Image.

Notwithstanding this, a conscious effort has been made to embellish landscape planting opportunities upon the podium communal open space area, so as to soften and enhance this area as a green space for the enjoyment of future residents and visitors.

Building Separation

The objectives of this control are:

- a) To ensure an appropriate level of amenity for building occupants in terms of daylight, outlook, view sharing, ventilation, wind mitigation, and privacy.*
- b) To achieve usable and pleasant streets and public domain areas in terms of wind mitigation and daylight access.*

Refer to justification already provided under the ADG review provided in *Section 6.9* of this report.

6.12.2 General Provisions

There are additional provisions contained within the following chapters of the *DCP* that are relevant to the application. These chapters provide objectives and controls to encourage quality urban design, a high level of residential amenity, and environmental sustainability in development occurring throughout the Wollongong LGA.

- *A1 – Introduction:* A comprehensive site and context analysis has been undertaken as required, to enable an appropriate assessment of the development proposal relative to the site's context.
- *D1 – Character Statements:* As detailed above, a comprehensive site analysis has been



undertaken in order to evaluate the characteristics of the locality. The proposal is compatible with the existing and desired future character, along with the development principles contained within Section 3.32 of the DCP.

- *E2 – Crime Prevention Through Environmental Design (CPTED)*: The proposed development has been designed with CPTED principles in mind, which seek to encourage the creation of safer places through environmental design. Natural surveillance and sightlines have been considered as part of the building design to maximise the potential for public surveillance and reduce the risk of crime. The appropriate placement of landscaping and lighting will support and reinforce safety and security principles. In this regard, the proposal is generally considered to satisfy the objectives and controls contained within Chapter E2 with respect to CPTED.
- *E3 – Car Parking, Access, Servicing/Loading Facilities and Traffic Management*: It is considered that the proposed parking, access, servicing and traffic management arrangements will be sufficient to accord with Council's DCP considerations.
- *E6 – Landscaping*: A Landscape Concept Plan has been prepared by Site Image Landscape Architects in accordance with Council's requirements (see attached).
- *E7 – Waste Management*: In accordance with this chapter, a WMP for the ongoing commercial/residential use of the overall development has been prepared by Solution 1 Traffic Engineers and is attached to the application for Council's consideration. This plan details the estimated waste material types and quantities, and methods of disposal/recycling for the proposed development.
- *E11 – Heritage Conservation*: This chapter of the DCP applies as the site is situated adjacent to and within the vicinity of a heritage item. As such, a Historical Heritage Assessment & Statement of Heritage Impact has been prepared by Austral Archaeology and concludes and recommends:

The development is in the vicinity of a war memorial and sandstone arch, and Canary Island date palms located in MacCabe Park. These items are both of local heritage significance and are listed under Schedule 5 of the Wollongong LEP. The development will not impact directly on these items and any potential impacts to these items from the development are likely to be minimal based upon the nature, configuration and location of these items.



The significance of the Canary Island date palms relates to their importance as a collection of notable, aged examples which represent earlier attempts to beautify the city by Council. This significance is confined to the park itself and does not extend to include any adjacent properties. The war memorial and arch are significant landscape elements in Wollongong and serve an important role in ANZAC commemoration activities undertaken across the city. However, the memorials are located within a grove of trees which visually and physically separate it from the surrounding parkland.

The development will have a minimal impact on the heritage significance of either item. The proliferation of modern developments within the locality have already had impacts on the heritage value of the area. The only quantifiable impact to the date palms is on the west facing view from the palms looking towards Keira Street, where a few outlying palms are located. However, this view already consists of unaesthetic factory buildings.

While the study area has been identified as containing potential archaeological relics, these are to be handled through the implementation of an archaeological testing and, if required, salvage program.

*The development is **acceptable** from a heritage standpoint.*

In order to mitigate against the harm documented in this assessment, it is recommended that:

- 1) Given that parts of the study area have been assessed as having archaeological potential, and relics of local significance are likely to be impacted during the proposed construction works, an excavation permit is required under the NSW Heritage Act 1977. The proponent should apply for a Section 140 Excavation Permit. A suitably accredited archaeologist who is approved by the heritage team of the DPC to oversee the excavation of sites of local significance will need to be nominated as Excavation Director.*
- 2) Following demolition of the existing building down to any concrete hardstand, archaeological investigations will be required in advance of construction. The investigations can only be undertaken following the approval of the Section 140 Excavation Permit and will involve a sub-surface testing, and potentially salvage, programme overseen by the nominated Excavation Director.*
- 3) In the event that historical archaeological relics not assessed or anticipated by this report are found during the works, all works in the immediate vicinity are to cease immediately and the Heritage Division be notified in accordance with Section 146 of the NSW Heritage Act 1977. A qualified archaeologist is to be contacted to assess the situation and consult with the heritage team of the DPC regarding the most appropriate course of action.*

- 4) *In the event that Aboriginal archaeological material or deposits are encountered during earthworks, all works affecting that material or deposits must cease immediately to allow an archaeologist to make an assessment of the find. The archaeologist may need to consult with the Aboriginal heritage team of the DPIE and the relevant Aboriginal stakeholders, regarding the find. Section 89A of the National Parks & Wildlife Act 1974 requires that the DPIE must be notified of any Aboriginal objects discovered within a reasonable time.*
- 5) *Should the proposed development be altered significantly from the proposed concept design, then a reassessment of the heritage/archaeological impact may be required. This includes any impacts not explicitly stated in Section 7 and the installation of any subsurface services.*
- 6) *A copy of this assessment should be lodged by the proponent in the local history section of the local library, and in the library maintained by the heritage team of DPC.*

In this regard, the recommendations of the report can be conditioned as part of the consent to ensure that Council can be satisfied that any artefacts found will be dealt with in the appropriate manner and the site and development suitably progressed.

- *E14 & 15 – Stormwater Management & Water Sensitive Urban Design:* Stormwater details and WSUD provisions are provided in the engineering drawings prepared by Adams Engineers to address the requirements outlined in the relevant provisions contained within both chapters of the DCP.
- *E13 – Floodplain management:* Again, The site is identified as being affected by flood (Medium and High Flood Risk Precinct) having a significant bearing on the project requiring “no encroachment into the High Flood Risk Precinct area, no reduction in conveyance capacity of the site, and no increase in flooding elsewhere, as a result of the development. The overland flow path through the site will need to be maintained.” (Pre-lodgement notes – PL-2018/235). An independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd (attached to this application) in accordance with Chapters E13 and E14 of the WDCP 2009.

The flood impact assessment addresses the issue of flood risk and satisfy the consent authority that the matters outlined in subclause 3 have been addressed. Namely, that:



The results show that the proposed development site is affected by overland flow, with maximum depths of approximately 350 mm during the 1% AEP. In the proposed development scenario, the maximum peak flood depth is 340mm. For both the existing and proposed scenario the average peak flood depths is 160mm across the site and drainage easement.

Modelling indicates the proposed development results in no tangible increase in peak flood level for events up to and including the 1% AEP. Flood storage within the site and the drainage easement increase by 16 m³ during the 1% AEP.

The advice confirms that the appropriate flood risk management measures have been undertaken in relation to flood levels and overland flow. In this regard, it is considered the impacts of localised flooding will be suitably managed and are not a prohibitive constraint for the proposed development.

- *E19 – Earthworks (Land Reshaping Works):* Again, the proposed development will require excavation and earthworks. The nature of this work and associated excavations are all standard engineering practices for this type of development.

It should be noted that considerations have been put in place with respect to the current Right Of Carriageway (ROC) benefiting the northern neighbour. To this end, the ROC will be temporarily out of use during the excavation and construction of basement, so the provision for a through-site vehicular link along the northern boundary from Kenny Street to Keira Street will be put in place during construction of the basement. This will ensure the northern neighbour can temporarily still retain access to and from the property, until basement works are complete and the dedicated ROC can be re-established as existing.

It is considered that Council can be satisfied that the work proposed can be undertaken in an appropriate manner (subject to contemporary 'best practice' engineering) so as to not be detrimental to the surrounding environment.

- *E20 – Contaminated Land Management:* Again, The site comprises of four individual allotments that have historically been used for light commercial and industrial purposes.

A DSI Report has been prepared by Douglas Partners Pty Ltd (attached to this application). The DSI Report finds:

On the basis of the investigation findings, it is considered that the site is suitable for the proposed mixed used development from the contaminated land perspective subject to the following recommendations.

- *A pre-demolition hazardous building materials survey be undertaken prior to the demolition of the site structures;*
- *A waste classification assessment including an acid sulfate soils assessment, must be undertaken following the demolition of the existing structures but prior to removal of any surplus material from the site. This should specifically target identified potential sources of contamination for the purpose of waste classification;*
- *As part of the off-site disposal or reuse classification for the natural materials, assessment will be required to validate that natural materials have not been impacted by former site activities, including the complete removal of overlying fill*
- *Assessment of any fill that is proposed to be retained onsite. This would include a review of existing data, data that would be obtained as part of a waste classification assessment, and may require further assessment depending on the extent and type of fill proposed to be retained;*
- *As a matter of due diligence and given the current buildings and hardstand areas precluding visual and physical access to the entire site, it is recommended that an unexpected finds protocol be implemented as part of a construction environmental management plan for any future proposed earthworks or development.*

These findings can be conditioned as part of the consent and Council can be satisfied that the site can be made suitable for the proposed land uses.

- *E21 – Demolition and Asbestos Management:* As required, a Demolition Plan has been prepared by Brewster Murray and is included with the application.
- *E22 – Soil Erosion & Sediment Control:* As required by acceptable building practices, temporary erosion control and silt arresting measures will be implemented and maintained during construction works.

In light of the above, it is considered that the proposed development accords with the general intent and provisions of *WDCP 2009*.

6.13 Impacts of the Development

The potential impacts which may occur as a result of the development are outlined below.

6.13.1 Traffic and Parking

A Traffic and Parking Assessment has been provided by Solution 1 Traffic in support of the development. The report concludes that there will be no adverse traffic implications and the proposed development complies with Council's code and other relevant requirements, as appropriate. The proposed vehicle



access and circulation arrangements will be suitable and appropriate.

6.13.2 Stormwater and Flooding

Stormwater, water quality and flooding have been addressed by Adams Consulting Engineers, and engineering details are attached to the application to meet the requirements of Council.

An independent flood impact assessment has been prepared BMT Eastern Australia Pty Ltd (attached to this application) in accordance with Chapters E13 and E14 of the WDCP 2009. The advice confirms that the appropriate flood risk management measures have been undertaken in relation to flood levels and overland flow. In this regard, it is considered the impacts of localised flooding will be suitably managed and are not a prohibitive constraint for the proposed development.

6.13.3 Social and Economic Impacts

The proposal will not give rise to any unacceptable social impacts. The development will allow for the orderly and economic development and use of the land, which will result in direct benefits to the both the owners of the subject site and surrounding land.

6.13.4 Solar Access

The ADG design criteria for solar access are fully satisfied.

6.13.5 Cross Ventilation

The relevant design criteria and ADG nominates 60% as a minimum. Therefore, the proposed development fully complies with the relevant control for natural ventilation.

6.13.6 Urban Design

The proposed development is in keeping with the desired future character of Wollongong City Centre, and in particular this southern edge location close to the train station. The built form and scale is commensurate with the site's capabilities under current planning controls, and will provide a positive contribution to the locality.

6.14 The Suitability of the Site for the Development

The site is situated on the edge of the Wollongong CBD and the proposed mixed use commercial/residential development is appropriate for the site and is compatible with the surrounding uses and built form. The land is situated in close proximity to a wide range of shops, services, public transport and facilities. In this regard, the site is considered to be suitable for the development as proposed.

6.15 Consultation and Submissions

Council will need to undertake consultation in accordance with the requirements contained within the *WDCP 2009*. In this regard, any submissions received in relation to the development will be reviewed and considered.

6.16 The Public Interest

The proposal is considered to be in the public interest as it provides additional housing to meet the needs of the community and does not result in any significant adverse impacts. Additionally, both short term and longer term employment opportunities will be created as a result of the construction of this development being generally:

- (1) consultancy and trades during the construction program; and
- (2) future maintenance/management contracts for the life of the development.

7.0 Conclusion

This amended SEE relates to a DA which seeks approval for proposed demolition of existing structures and construction of a new multi-level mixed use development at 264-268 Keira Street & 23 Kenny Street, Wollongong (the site).

The site comprises of four (4) individual allotments (legally referred to as Lot 101 DP 709651, Lot 1 DP 800021, Lot 4 DP 522288, and Lot 100 DP 1130021) which will be amalgamated to form the development parcel. It is located directly opposite McCabe Park, on the eastern side of the rail corridor.

The proposed development comprises commercial premises at ground level, with shop top housing above to accommodate 107 residential apartments. It includes two (2) levels of basement parking, associated landscaping and stormwater drainage.

This SEE provides an assessment of the proposal against the environmental planning framework. It confirms that the proposal is generally consistent with relevant key controls contained within SEPP 65, the WLEP 2009 and the WDCP 2009, with the exception of building separation.

A written request to justify an exception to the above-mentioned development standard has been prepared under *Clause 4.6 of WLEP 2009* to demonstrate that compliance is unreasonable or unnecessary in the circumstances, and that there are sufficient environmental planning grounds to justify the proposed non-compliance.

Suitable justification has been provided to address the above mentioned non-compliance. The assessment in *Section 6* demonstrates that the proposal will not result in any significant adverse impacts.

The development provides commercial floorspace to strengthen the role and function of the Wollongong City Centre, as well as much needed housing to meet the needs of the local community.

The site is situated in an accessible location, close to shops, services, public transport and employment.

Based on the assessment undertaken, DA approval is warranted. The Southern Joint Regional Planning Panel is the consent authority as the CIV of the development is more than \$30 million. As such, we look forward to Council's favourable determination of the DA.



APPENDIX 1:

“Exceptions to Development Standards Justification Statement”

EXCEPTION TO DEVELOPMENT STANDARD VARIATION STATEMENT

Building Separation - Wollongong City Centre

Address: 264-268 Keira Street & 23 Kenny Street, Wollongong

Proposal: Mixed Use Development

Date: December 2019

1.0 Introduction

The purpose of this variation statement is to outline the justification for seeking an exception to the minimum building separation within Zone B3 Commercial Core (being a development standard) contained within the *Wollongong Local Environmental Plan 2009 (WLEP 2009)*. This variation statement has been prepared in consideration of Clause 4.6 and *Part 8 - Clause 8.6(3)(b)* (Minimum building separation) in *WLEP 2009* and the NSW Department of Planning, Infrastructure and Environment's (DPIE) *"Varying development standards: a guide"* (August 2011).

The advice herein relates to an application for the proposed demolition of existing structures and construction of a multi-level mixed use development at 264-268 Keira Street and 23 Kenny Street, Wollongong. In this regard, the proposed development will incorporate the construction of a new fifteen (15) storey building including ground floor commercial space containing one (1) office premises, two (2) retail spaces and (1) café space; five (5) levels of podium residential units supporting a residential tower above, to provide 107 residential apartments; communal space areas; and basement car parking over two (2) levels.

The details of this proposal are shown within the Development Drawings prepared by Brewster Murray (attached to the application), which identifies the proposed building separation in

question.

The proposed development application seeks to provide an appropriate and balanced development/environmental outcome for the subject site, and the Wollongong City Centre area as a whole. In doing so, an exception to a development standard contained within *Wollongong Local Environmental Plan (LEP) 2009* has been adopted. In this regard, the proposed development generally accords with all *LEP* controls, apart from a numerical variation being requested to the building separation development standards contained within *Clause 8.6 Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use*. Hence the purpose of this statement.

The request is in writing to address the relevant provisions within *Clause 4.6*, to demonstrate that strict compliance with the development standard is unreasonable in the circumstances of the case, and that there are sufficient environmental planning grounds to justify the proposed variation sought.

This statement has been prepared in accordance with the NSW Department of Planning Infrastructure (DPI) guideline “*Varying Development Standards: A Guide*” dated August 2011. Applications to vary development standards should also address the ‘five-part test’ established by the NSW Land and Environment Court (LEC) to determine whether the objection is well founded. An assessment of this applicant against the ‘five-part test’ is included in this statement.

2.0 Overview of Clause 4.6

Clause 4.6 provides a framework for varying the applicable development standards under a Local Environmental Plan (LEP).

The objectives of this clause are as follows:-

- (a) to provide an appropriate degree of flexibility in applying particular development standards to particular development;*
- (b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

Sub *Clauses (3)(a)* and *(3)(b)* state that development consent must not be granted unless the consent authority has considered a written request from the applicant that seeks to justify the contravention by demonstrating:

- (a) that compliance with the development standard is unreasonable or unnecessary in the circumstances of the case; and*
- (b) that there are sufficient environmental planning grounds to justify contravening the development standard.*

This Statement provides a written request seeking to demonstrate the development standard is unreasonable or unnecessary in the circumstances of the case and that there are sufficient environmental planning grounds to justify contravening the development standard based on the following rationale (summary):

- The development largely complies with the numerical standards of the LEP and DCP
- The constraints of the subject site making fully compliant development of this nature impossible to achieve.
- The development is consistent with the objectives of the B3 Commercial Core Zone.

The zone objectives are as follows:

- *To provide a wide range of retail, business, office, entertainment, community and other suitable land uses that serve the needs of the local and wider community;*
- *To encourage appropriate employment opportunities in accessible locations;*
- *To maximise public transport patronage and encourage walking and cycling;*
- *To strengthen the role of the Wollongong city centre as the regional business, retail and cultural centre of the Illawarra region;*
- *To provide for high density residential development within a mixed use development if it:*
 - (a) is in a location that is accessible to public transport, employment, retail, commercial and service facilities, and*
 - (b) contributes to the vitality of the Wollongong city centre.*

The relevant zoning objectives outline a need to strengthen the role of the City Centre by providing for a range of land use activities that support employment and public transport patronage (as above).

The proposed development is both permissible within the B3 zone as a commercial/retail premises and shop top housing, meeting the needs of the community by providing additional residential accommodation within close proximity to the CBD precinct and Wollongong train station.

Such a proposal is in high demand for the immediate area (from a land use perspective) and the site itself is very accessible from a patronage and public transport viewpoint. Thus, the proposed development directly accords with the objectives of this zone.

There are no unreasonable impacts from the proposal, despite this departure and other minor WDCP 2009 variations. With regard to context and setting, Kiera Street itself is characterised by developments of a comparable type and scale (built and approved). The proposed development has demonstrated that a functional building can be provided, including appropriate carparking and access, landscaping and private open space areas, without detrimentally impacting the surrounding properties.

In summary, it is concluded that the development standard is (a) unreasonable or unnecessary in the circumstances of the case.

(3) (b) Assessment of the proposal under the applicable planning controls has determined that besides the proposed variation to building separation requirement and minor WDCP 2009 variations, the development is largely compliant with the applicable controls. However, as demonstrated in this report, the proposed design mitigates any adverse impacts from the reduced building separation. In addition, solar access is not compromised to adjoining lots and amenity, (privacy, visual, acoustic etc.) of the surrounding lots and general area will not be unreasonably impacted by the development.

The proposed building has been designed to respond appropriately to the limitations posed by the site and is considered to be a reasonable development outcome for the site. The proposed

building will not detrimentally impact solar access or visual and acoustic privacy, and is an appropriate urban form that will contribute positively to the streetscape.

In summary it is considered that there are sufficient site specific environmental planning grounds to justify contravening the development standard.

Furthermore sub *Clause 4(a)(i)* and *(ii)* provide that development consent must not be granted unless:-

(a) the consent authority is satisfied that:

(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and

(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and

(b) the concurrence of the secretary has been obtained.

This written request has adequately addressed the matters required to be demonstrated by subclause (3). It is considered that the departure from the minimum building separation requirement, is in the public interest as outlined above in (3) (a) and (3) (b)

In deciding whether concurrence is to be granted or assumed, the following considerations are relevant:-

(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning; and

(b) the public benefit of maintaining the development standard, and

(c) any other matters required to be taken into consideration by the Secretary before granting concurrence.

It is noted that as of 21 May 2014 Council has assumed concurrence of the Secretary in relation to development applications that contravene development standards.

3.0 Details of the environmental planning instrument, the applicable development standard and proposed variation.

3.1 What is the applicable environmental planning instrument (EPI)?

The *Wollongong Local Environmental Plan 2009 (WLEP 2009)*.

3.2 What is the development standard being varied?

The Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use requirement contained in *Part 8 - Clause 8.6(3)(b)* of the *WLEP 2009* which states:

“(3) Despite subclause (2), if a building contains a dwelling, all habitable parts of the dwelling including any balcony must not be less than:
(b) 16 metres from any other part of any other building...”

In this regard, the design of the proposed development is sited with the built form covering the majority of the site. Its massing adopts a zero lot line to the eastern and western street fronting boundaries and the southern boundary up to 21m (which neighbours an existing commercial buildings built to the common boundary), and a 8.05m setback to the northern boundary which includes an undevelopable area of the property (easement) to be used as an overland flow area in the guise of a cross link between the front and rear of the site. The southern façade is 8.6 metres from any habitable window.

The front of the site facing Keira street is restricted in height and form by a separate clause in Wollongong LEP 2009 (Clause 8.3) Sun plane protection which protects: *specified public open space from excessive overshadowing by restricting the height of buildings*. In this instance, the public open space is MacCabe Park, which is also a locally listed heritage item. The development therefore does not propose any built form within the site beyond 21m to comply with this clause. The rear of the site proposes a 15 storey tower, in single apartment depth.

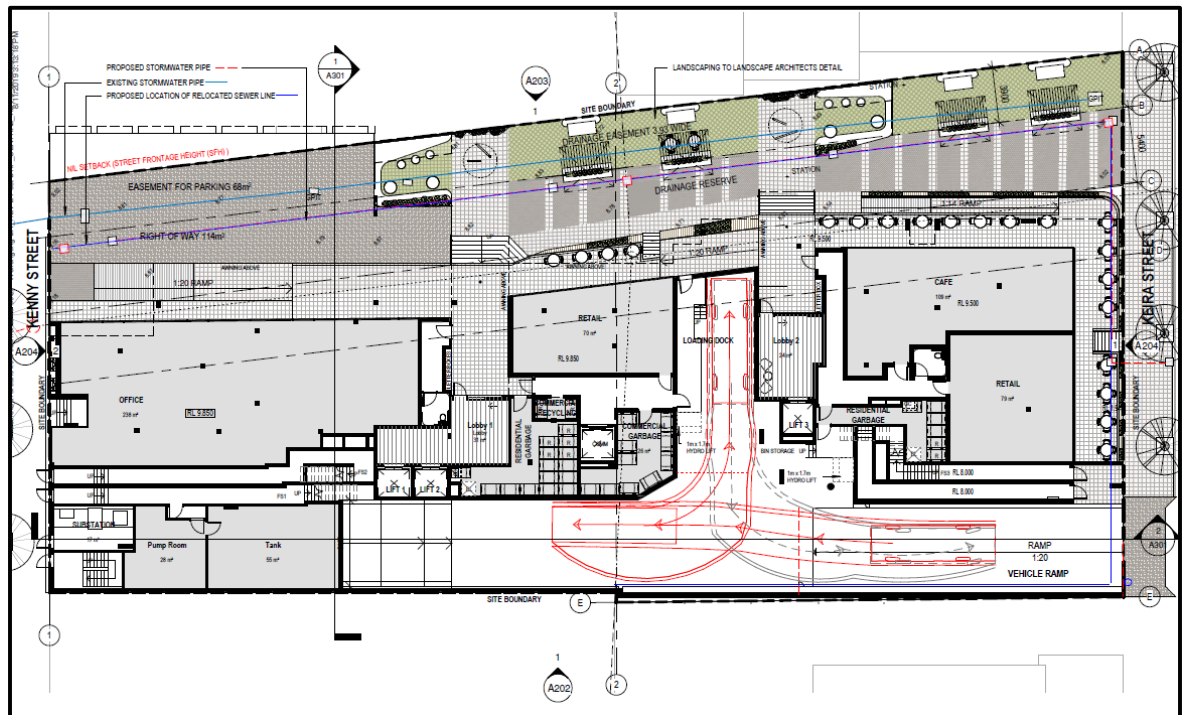


Figure 1: Proposed Site and Ground Floor Plan (*Source: Brewster Murray)

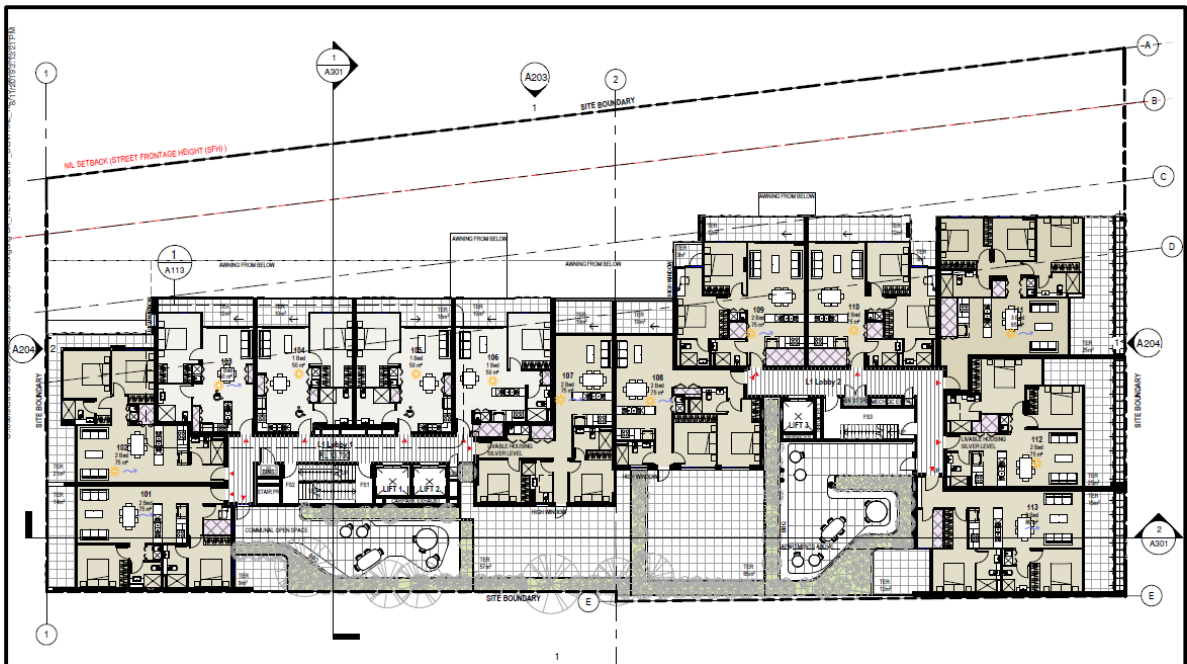


Figure 2: Proposed First Floor Plan (*Source: Brewster Murray)

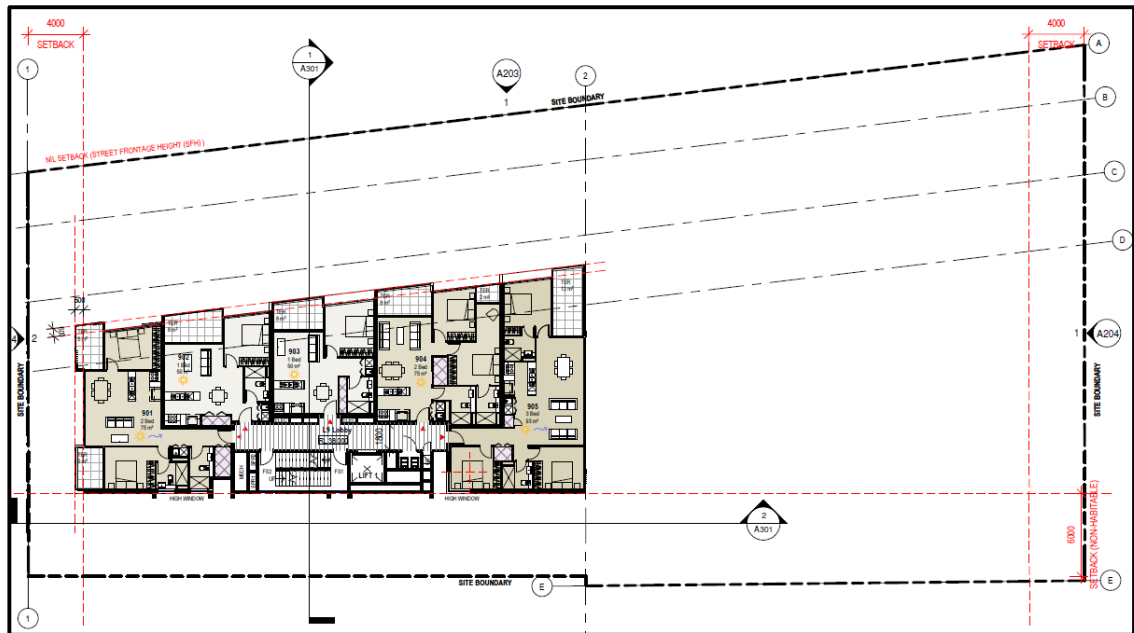


Figure 3: Proposed Level 9 Plan (*Source: Brewster Murray)



Figure 4: 3D perspective (*Source: Brewster Murray)

3.3 What are the objectives of the standard?

The objective of this clause is: *to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access.*

Further consideration of this objective in relation to the proposed development is provided within the following sections below.

3.4 What is the percentage variation (between the proposal and the EPI)?

The minimum separation distance permitted is 16 metres from any other part of any other building. The application proposes habitable parts of the development situated 8.05m from the northern boundary and 8.6m from the southern boundary.

As such, the proposal exceeds the minimum separation distance permitted by 7.95, which represents a variation of 49.7%.

4.0 Assessment of Proposed Variation

4.1 Is compliance with the development standard unreasonable or unnecessary in the circumstances of the case?

Yes, compliance with the development standard is unreasonable in the circumstances.

In *Wehbe v Pittwater Council* [2007] NSWLEC827 (*Wehbe*), Preston CJ identified five (5) ways in which an applicant might establish that compliance with a development standard is unreasonable or unnecessary. While *Wehbe* related to objections pursuant to State Environmental Planning Policy No. 1 – Development Standards (SEPP 1), the analysis can be of assistance to variations made under clause 4.6 because subclause 4.6(3)(a) uses the same language as clause 6 of SEPP 1 (see *Four2Five* at [61] and [62]).

The five (5) ways outlined in *Wehbe* include:

1. The objectives of the standard are achieved notwithstanding noncompliance with the standard (First Way)
2. The underlying objective of purpose of the standard is not relevant to the development and therefore compliance is unnecessary (Second Way)
3. The underlying object or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable (Third Way)
4. The development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable (Fourth Way)
5. The zoning of the particular land is unreasonable or inappropriate so that a development standard appropriate for that zoning is also unreasonable and unnecessary as it applies to the land and compliance with the standard would be unreasonable or unnecessary. That is, the particular parcel of land should not have been included in the particular zone (Fifth Way).

Additionally, of note, in the judgment in *Randwick City Council v Micaul Holdings Pty Ltd* [2016] NSWLEC 7 the Chief Judge upheld the Commissioner's approval of large variations to height and FSR controls on appeal. He noted that under clause 4.6, the consent authority (in that case, the Court) did not have to be directly satisfied that compliance with the standard was unreasonable or unnecessary, rather that the applicant's written request adequately addresses the matters in clause 4.6(3)(a) that compliance with each development standard is unreasonable or unnecessary.

In this regard, this written request establishes and adequately addresses the matters in clause 4.6(3)(a) that compliance with each development standard is unreasonable or unnecessary because the objectives of the standard are achieved irrespective of the non-compliance with the building separation controls, and accordingly justifies the variation to the building separation control pursuant to the First Way and Forth Way outlined in *Wehbe*, as follows.

Under WLEP 2009, Clause 8.6(3)(b) has the following objectives in relation to the Building

separation development standard: *to ensure sufficient separation of buildings for reasons of visual appearance, privacy and solar access.*

Visual Appearance

The visual appearance of well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

The proposal has made use of quality materials and colours appropriate to the context and surrounding area.

The building facade to Keira Street and Kenny Street emphasise and accentuate parts of the building façade through the use of a similar language to achieve a cohesive building outcome and understand the theory and principles behind the design. Changes in colour and façade materials help to articulate the podium and addresses street frontage with appropriate proportions.

The theory and principles to the aesthetics of the building design have arrived from a multiple of stimulants and ideas culminating in a focussed and narrowed theory gathered from the development of the building and the surrounding context. The breakdown of a base, middle and top helps to create an aesthetic which will sit comfortably in its surrounding scale and context as well responds to the expected future character of the precinct.

Developing the constraints and opportunities of the site has allowed the building to move and transform from the active to a sense of the building's simplicity and nature. The language of the building's facades has been carried through responding to the site forces orientation and constrains posed by the site. The use of materials and colours has also been carried through to help express this language.

Consideration has been made to the southern façade where walls are articulated with texture and pattern to mitigate any blank walls.

Selected quality, modern, durable and environmentally sustainable external finishes ensures the proposed development enhances the amenity of the local area. Carefully selected colours sympathetic to the visual composition of neighbouring developments maintains and responds

appropriately to the current and desired future character of the precinct. The materials selected such as facade panels in various shades, masonry render and paint in various shades, several of types of glazing, textured feature walls have provided the building with a high quality, low maintenance external façade that contributes positively to the visual presentation of the development.

Privacy

Privacy has been considered specifically noted in the design response shown in the architectural interface treatment to these boundaries (almost as if they were non-habitable type facades). The existing land uses in close proximity are primarily commercial at this stage, to which no significant overlooking privacy impact will be created as a result of the proposal.

The internal layout of the rooms attempt to minimise overlooking with the careful location of window and door openings, whilst the size of external balconies also help maintain such visual separation.

Acoustic privacy for future visitors and neighbouring land uses has also been taken into account, with the proposed development being designed to limit noise intrusion into adjoining properties through the use of appropriate building materials and associated noise control treatments. The proposed development has been supported by a Noise Assessment prepared by JHA Services, which provides a range of acoustic recommendations to ensure the proposed development will comply with the relative sections of the EPA and Council requirements/conditions, and will not create any offensive noise to the surrounding residents.

Solar access

The layout and planning are a direct response to the site orientation. The apartments aspects being used for primary living spaces are orientated north to maximise the main solar collector and main outlook for the development.

The layouts demonstrate grouping of the services and circulation space and secondary living areas on majority of north-eastern façade and is treated architecturally with windows of smaller proportion to gain advantage of the solar access.

This design response has resulted in 96 apartments representing 89% of total proposed apartments receiving 2 or more hour's sunlight to their living spaces.

On this basis, the proposed development has been assessed against each objective contained in clause 8.6(3)(b) of WLEP 2009. Thus, deeming strict compliance in accordance with the First Way is unwarranted in the circumstances of this particular case.

In relation to the Fourth Way "The development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable (Fourth Way)" it is noted that the following approvals have proposed the same variation and have been approved thereby abandoning the development standard:

DA-2016/969: 48 Bank Street WOLLONGONG NSW 2500

Demolition of existing structures and construction of shop top housing comprising ground floor commercial and six residential levels with basement parking

DA-2017/1462: 47 Burelli Street WOLLONGONG NSW 2500

Demolition of all structures, and the construction of a seven (7) storey office building for IMB bank with two basement car parking levels for 89 car parking spaces

DA-2017/493: Langs Building 95-109 Crown Street WOLLONGONG NSW 2500 Commercial - demolition of existing building and construction of new commercial premises comprising of offices and retail tenancies

DA-2017/730: 131-135 Keira Street WOLLONGONG NSW 2500

Demolition of existing buildings and ancillary structures and the construction of a mixed use development above basement parking

DA-2018/973: 28 Young Street WOLLONGONG NSW 2500

Residential - demolition of existing structures and construction of a 15 storey mixed use development comprising seven (7) commercial tenancies, 64 residential apartments and car parking for 90 vehicles

Thus, deeming strict compliance with the minimum building separation is unwarranted (Forth Way) in the circumstances of this particular case.

4.2 Are there sufficient environmental planning grounds to justify contravening the development standard?

“Environmental planning grounds” take their colour from the subject matter, scope and purpose of the Environmental Planning and Assessment Act 1979 (EPA Act), including its objects. The below provide a breakdown of the key environmental planning grounds which support the proposed variation request, including:

The unique circumstances at the site which warrant the provision of reduced setback:

The building potential is already limited by a height control to the front of the site. Adopting building separation requirements to (potential) dwellings to the north and south on the remainder of the site would mean a large part of the subject site would be excluded from any built form. Logically, restricting a built form envelope by this amount is completely impractical for a City Centre B3 zoned site at this location and, therefore, totally unreasonable to consider in this instance.

The proposed building form does not result in any significant adverse impacts and achieves a good urban development outcome for the site:

The building intrusions into the side/rear setbacks are a direct design response with the intent to allow the site to respond to the demand for housing in the area, whilst supporting Wollongong Councils objectives for built form within the B3 zoned City Centre.

The proposed bulk and scale of this building is considered appropriate for this City Centre location, and will not detrimentally affect the visual appearance of the area (in fact it will substantially improve an aged part of the City, which is undergoing change with other similar scale redevelopments occurring nearby). The overall height and form of the

development is consistent with expected future desired character strategies for the area.

The maintenance of design excellence through the proposed alternate strategy, which has been designed to be a core element of the delivery of the integrated station development outcome.

“In considering whether development to which this clause applies exhibits design excellence, the consent authority must have regard to the following matters:

- (a) whether a high standard of architectural design, materials and detailing appropriate to the building type and location will be achieved,*
- (b) whether the form and external appearance of the proposed development will improve the quality and amenity of the public domain,*
- (c) whether the proposed development detrimentally impacts on view corridors,*
- (d) whether the proposed development detrimentally overshadows an area shown distinctively coloured and numbered on the Sun Plane Protection Map,*
- (e) how the proposed development addresses the following matters:*

- (i) the suitability of the land for development,*
- (ii) existing and proposed uses and use mix,*
- (iii) heritage issues and streetscape constraints,*
- (iv) the location of any tower proposed, having regard to the need to achieve an acceptable relationship with other towers (existing or proposed) on the same site or on neighbouring sites in terms of separation, setbacks, amenity and urban form,*
- (v) bulk, massing and modulation of buildings,*
- (vi) street frontage heights,*
- (vii) environmental impacts such as sustainable design, overshadowing, wind and reflectivity,*
- (viii) the achievement of the principles of ecologically sustainable development,*
- (ix) pedestrian, cycle, vehicular and service access, circulation and requirements,*
- (x) impact on, and any proposed improvements to, the public domain.”*

The architectural design, materials and detailing are of a high standard that is appropriate to the building type and location. The external appearance and form of the development will improve the quality and amenity of the public domain in the immediate vicinity of the site.

The proposal will not unreasonably impact on view corridors given it is below the maximum height limit of 48m allowed to the western side of the site and less than 24m permitted on the eastern side of the site under the *WLEP 2009*. In addition, the proposal will not overshadow the areas shown on the Sun Plane Protection Map.

The land is suitable for the proposed mixed use development and the allocated mix of commercial/residential floor space, given the location of the site on the edge of the City Centre.

The proposal will be compatible with future developments in the immediate vicinity of the site and therefore will enhance the streetscape (which currently contains several older style buildings that are in need of refurbishment or repair, including those situated on the subject site that will be demolished as part of the DA).

The location of the tower and the proposed bulk, massing and modulation of the building is acceptable and does not result in any unreasonable loss of amenity to any of the adjoining properties. The proposed street frontage heights are considered appropriate having regard to the surrounding context and scale of development.

The proposal will have no significant adverse environmental impacts in terms of sustainability, overshadowing, wind and/or reflectivity. Relevant details have been provided in this regard to enable a full assessment (i.e. shadow diagrams, wind report, BASIX certificates etc).

Access to the site has been carefully considered in a variety of forms (i.e. for pedestrians, motorists and cyclists alike), with suitable provisions to allow for

service access and circulation. The proposed development will have a positive impact on the public domain and interface of Keira and Kenny Streets.

This will significantly improve the amenity and character of the blocks/precinct surrounding the location. It will also allow for natural surveillance of the area with regards to the principles of Crime Prevention Through Environmental Design (CPTED).

The delivery of a development outcome which does not result in any adverse environmental impacts

Environmentally sustainable measures incorporated in the development include:

- Building orientates north or northerly aspect to maximise solar gain. 96 apartments represent 89% of total proposed apartments receive 2 or more hour's sunlight to their living spaces.
- Design solution provides effective benefices to cross flow ventilation to most apartments by generating natural cross ventilation through dual aspects and corner orientation of apartments. 66 apartments represent 62% of total proposed apartments are naturally ventilated.
- Maximised planting on terraces;
- Ethically source long lifecycle products and materials;
- Dual flush toilets;
- Rainwater to be used for garden irrigation;
- Taps fitted with water efficient fittings;
- Insulation and sisalation under roof;
- Solar panels at roof level;
- Proposed visitor and residential bicycle parking in compliance with Wollongong Council's Development Control Plan

As above, we acknowledge the proposed development will bring some overshadowing impact upon the neighbouring properties to the south. Practically, due to site orientation it would be almost impossible to redevelop the subject site for anything greater than a few storeys without having any

impact whatsoever. At this point in time, all development to the south is commercially warranted activities, which means no unreasonable loss of residential amenity will be created as a result of the proposal.

The reduced building separation is deemed reasonable and acceptable due to the reduced impacts to privacy and overlooking, created specifically by responsive architectural interface treatment to these boundaries (almost as if they were non-habitable type facades).

The development has been specifically designed to provide a suitable environment for all future inhabitants of the dwellings, whilst respecting the considerations of adjoining land uses. The internal layout of the rooms attempt to minimise overlooking with the careful location of window and door openings, whilst the size of external balconies also help maintain such visual separation.

Acoustic privacy for future visitors and neighbouring land uses has also been taken into account, with the proposed development being designed to limit noise intrusion into adjoining properties through the use of appropriate building materials and associated noise control treatments. The proposed development has been supported by a Noise Assessment prepared by JHA Services, which provides a range of acoustic recommendations to ensure the proposed development will comply with the relative sections of the EPA and Council requirements/conditions, and will not create any offensive noise to the surrounding residents.

Overall, it is evident from the above commentary provided that there are sufficient planning grounds to justify contravening the building separation development standards identified. To this end, strict compliance with the numerical development standards are both unwarranted and unnecessary in this instance.

4.3 Does contravening the development standard raise any matters of significance for the State or regional environmental planning?

No, contravening the development standard in this case does not raise any matters of State or

Regional planning significance.

4.4 Is the objection well founded?

For the reasons outlined in the previous sections above, the objection is considered to be well founded in this particular instance. Granting an exception to the development standard can therefore be supported in the circumstances of the case.

The proposed development will be consistent with the outcomes envisaged in the zoning and policy framework. The development is also compatible with the relevant objectives specified in *Section 1.3* of the *EPAA 1979*.

5.0 Conclusion

The proposed variation is based on the reasons contained within this request for an exception to the stated *Building separation within Zone B3 Commercial Core or Zone B4 Mixed Use* requirement, being a development standard contained within the *WLEP 2009*. The proposal will not result in any adverse impacts with regards to the amenity of the adjoining properties.

The proposed non-compliance is unlikely to result in any future precedents given the surrounding pattern of development and the combination of zoning and other associated controls currently in place.

In conclusion, the objection is considered to be well founded and compliance with the standard is unreasonable in the circumstances of the case.

Yours faithfully,

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